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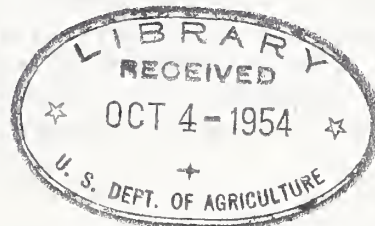
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INSPECTION
1953 General Integrating
Inspection, R-6
Cliff and Rotty

Report
on
GENERAL INTEGRATING INSPECTION
of
PACIFIC NORTHWEST REGION
and
FOREST AND RANGE EXPERIMENT STATION
Oregon and Washington
1953



June 15, 1954

Edward P. Cliff - Roland Rotty

TABLE OF CONTENTS

	Page
Foreword.....	1
Overall View.....	2
Forest Service Relationships with Local People and Communities.....	6
Inspection.....	8
Timber Management and Research.....	10
Watershed Management and Research.....	21
Range and Wildlife Management and Research.....	25
Recreation and Lands.....	31
Land Exchange.....	37
State and Private Forestry.....	38
Engineering.....	41
Fire Control and Research.....	45
Operation.....	48
Personnel.....	51
Fiscal.....	54

Appendix No. 1

Professor W. C. McCulloch's letter.....	a
Travel map and itinerary.....	d
List of non-Forest Service people met.....	e
List of Agreements with Outside Agencies for Cooperative Studies in Forest Management.....	g

Inspection record

Frequency by W.O. Divisions - 1947 - 1953	h
Analysis of W.O. Inspection Reports.....	i
Frequency of Inspections of Forests.....	l
Frequency of Inspections of Research Field Stations ..	m

Appendix No. 2

Material for this Appendix is with file copy only

FOREWORD

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The 1953 General Integrating inspection of Region 6 and the Pacific Northwest Forest and Range Experiment Station was made from August 3 through September 4 by Assistant Chief Edward P. Cliff and Roland Rotty, in charge of Cooperative Tree Distribution. A travel map and itinerary are given in the appendix. The previous such inspection was made in 1947 by McArdle, Murphy, and Chapline, and the one prior to that was made in 1937 by Loveridge and Peirce.

We tried to make our inspection one of the over-all goals and performance of a group of public servants--men and women--and their successors, rather than of individual persons. We tried always to look at the "what" and "why" of things, rather than the "who".

The inspection started with a two day meeting of the Regional Forester and Director, and their principal assistants. Complete or nearly complete attendance was made by all during these sessions. The work goals and problems of each function were presented by the appropriate officer through a short talk, written paper, and discussion period. Quite apart from its value to us, these presentations must have been most informative to the others in attendance for it gave them the whole picture of the Region's problems and progress in a way that could not be gotten otherwise. The 1947 report criticized the Station for incomplete and irregular attendance of its people in group meetings held during the inspection. Certainly the reverse was true this time.

During the field trip two or more Regional Office and Experiment Station men were usually traveling with us, changing every few days according to the principal activities at which we were looking until every Regional and Station Division Chief had traveled with us. The Regional Forester and Director traveled with us for most of the time and, of course, the local forest or research center personnel joined us each day. By careful pre-scheduling, the size of the total group was usually not more than two carloads while on a forest and but one between forests. Such a travel scheme was excellent for it gave us all a chance to become much better acquainted as well as for the inspectors to learn of each job from the man most directly responsible for it.

Pertinent written material was given us as the inspection progressed. This material was well prepared and makes an invaluable record of the 1953 situation. It is to be kept as Appendix 2 of this report.

At the close of the inspection a "round-up session" was held with the Regional Office and the Station staffs at which the inspectors summarized their observations, impressions and tentative conclusions.

The trip had had most careful advance planning, and we were able to follow it exactly. Personally we appreciated the many courtesies and the care for our comfort that was given us everywhere, and officially we appreciated the willingness to show and frankly discuss any detail of the work in which we expressed interest. The preparations of the Portland offices and the Forests and Research Centers to insure that we would see and understand the points of each day's travel were noteworthy.

OVERALL VIEWEconomic Background

The Pacific Northwest is going through a period of dynamic change. The population of Washington and Oregon increased slightly more than a million people between 1940 and 1950--27 $\frac{1}{2}$ % as against a national increase of 12 $\frac{1}{2}$ %--and it is still growing rapidly. The great expansion in industry on the West Coast during the war and post-war years has resulted in increased demands for raw material and for water for industrial and municipal uses. More and more people go to the national forests for fishing, hunting, and other types of recreation. This means that the issues involved in multiple use management are coming more sharply into focus than ever before.

The timber industry accounts for approximately \$1 $\frac{1}{2}$ billion annually which is about 53% of the gross annual income of the Pacific Northwest. Liquidation of the more accessible private timber holdings has continued at a rapid pace which has resulted in greatly increased demands for national forest timber. One of the changes in the timber industry most important to forestry in the Northwest has been the improvement in utilization. There has been a phenomenal growth in the veneer and plywood industry. The hardboard and softboard industry has shown remarkable growth as has the pulp industry. They provide a market for material formerly going into the burners and left in the woods. These are very wholesome trends but too much timber is still not being utilized in the woods and in the mills.

Forest Service opportunities and efforts

Against this background it is pertinent to ask "How well are the Regional Forester and Director and members of their staffs recognizing the broad needs of their Region? What are they doing to make the Forest Service an integral part of the whole economic and social structure of the area? What leadership in conservation are they taking? How well are they welding together all the different activities of the Service to help achieve these ends?" Their concepts of their responsibilities and opportunities and their efforts to meet them are best described by the statements of the Regional Forester, the Director, and members of their staffs during the first part of the inspection. (These statements are a part of Appendix 2.)

STONE: "In the management of the national forests we continue to seek a balanced development of all of the resources. I believe under the impact of war and emergency demands we have neglected recreational, wildlife, water, soil, and other aspects of our multiple use management. We are attempting to bring all of these into proper perspective in a program of balanced development and management."

"We are striving to do the best possible job of resource development and management with the funds available. Our goal in organization has been to seek continually to get decisions made as close to the ground as practicable. In order to have that type of organization effective we

appreciate the importance of the inspection tool. The use of this tool must be geared to our concepts of decentralized organization and responsibilities. I believe that there is a wide area for improvement and development of this tool and this we are seeking to give high priority in our administrative management program."

"In our cooperative work we strive to be helpful in the development of sound protection methods and in promoting good forest practices. I believe our relationships with both Forestry Departments are on a high level. Also we have good relationships with State Game Departments which make possible close cooperation in wildlife management."

"In our educational work we are seeking to first of all inform our own organization and give them an appreciation of their responsibility for taking a part in this tremendously important activity. In many instances good I&E work can help to avoid problems which lead to an even greater expenditure of time in an effort to cure evils or bad relationships which may have developed. I think that on the whole we have a reasonably good relationship with all our customers, but that is something which can only be maintained by continuing to do a good job of management of our public lands, and practicing a high degree of skill in our dealings with people."

"Certain it is that we are slighting to a degree quality in most of our activities. We have felt that the public interest would be better served by a type of improvisation such as building up the cut at the expense of some reduced quality. We are, however, attempting to maintain the proper integration of resource management and to strive to improve the quality weaknesses where they are detected. There is some value in being moderately over-extended because it forces us to seek better methods to eliminate out-moded procedures and furthermore, it requires attention to the selection of priorities. Some things we must leave undone. We cannot go too far in the slighting of quality."

COWLIN: "One significant fact in the situation is the changing nature of the market demand for Pacific Northwest timber products as industry and population move closer. To me this means no relief in the demands upon our forests for industrial raw material and other uses in the foreseeable future. It means a problem of growing complexity and magnitude in managing our forests. It means more specifically that our research programs must be flexible to meet changes in priority of problems, alert to detect such problems, and adequately staffed to carry through to the answers and their application."

"A short time ago protection and custody were our principal functions in public land management and users of the private forest lands were little concerned with what research had to offer. Now the demand for research and its guidance is overwhelming."

"I want to call attention ... to two major gaps in our research program These are forest influences or watershed management research and tree improvement or forest genetics research. Two other points I wish to call to your attention--first, the problem of obtaining prompt and abundant restocking of cut-over areas, and second, the dynamic nature of timber utilization."

".... we are not alone in the forest research field. Other public agencies, educational institutions, and private agencies are rapidly expanding research activities. Our joint efforts are resulting in some progress. Actually we are competing for leadership where we were once supreme. This is all good but there is problem of coordination and cooperation."

As mentioned in several other places in the report, this competition for leadership in the conservation field, not only from state and private agencies, but also from other Federal agencies such as BLM and SCS is one of the most challenging problems the Forest Service faces in Region 6. It is more pronounced here than in most other parts of the country. It can be met only by a high level of performance in both research and administration all up and down the line.

It is interesting to see how an informed outsider views the overall performance of the Region. We quote from a letter written to us by Prof. W. F. McCulloch of Oregon State College, who said in part, "Within the last five years I have been on every forest in Region 6, on seven of them during official inspection trips with Personnel or Operation. As a collaborator, I participated in a GII on the Willamette in July. The observations below therefore reflect actual field experience."

"For some years watershed management was not considered seriously by the Service or the forestry schools in the allegedly well-watered Northwest. In recent years, the Region has moved aggressively into this field and begun work of far-reaching consequence."

"I have been in the field in all ten regions, and against this experience must rate Region 6 at the top. The organization is tight, morale is high, the men are respected, and a very large volume of business is handled effectively."

(Professor McCulloch's entire letter is worth reading. It appears in Appendix 2.)

These statement combined with the demonstrations and discussions in the field convince us that the leaders of the Region and the Station are viewing their problems realistically. They and their subordinates are fully aware of the rank of the forests--national as well as others--in the Region's economy. They are giving good leadership and are striving for a balanced program of resource management and research. Most of the men we met are motivated by a sense of urgency to get on with the job of making the resources under their care contribute all possible to the economy and welfare of the people. Deficiencies are recognized and efforts are being made to correct them.

Attitudes

No longer can it justly be said that there is lack of cooperation between the personnel of the Station and the Region. Every place we went we saw evidence of good team work between these two branches of the Service. There is close collaboration on mutual problems, and the research men are trying to be genuinely helpful to the administrators.

There is still some provincialism in Region 6. It is probably less pronounced than a few years ago and is not considered by us to be serious. However, it is something that should be guarded against. Pride of Region, defense of methods and practices developed by the Region and the feeling that the work in one's region, forest, or ranger district is all-important are commendable if not carried too far.

About the time of the last GII, Region 6 had the reputation of being a "dissenter." This situation has also improved but there is still some of the "loyal opposition" attitude left. Cited as evidence is (1) the slowness with which the Region and Station accepted and implemented the instructions for Task VIII of the TRR, (2) the suppression of Engineering Circular E-3579 dated July 8, 1953 because some members of the Regional Office took exception to some of the instructions contained therein, and (3) the reluctance of the Region to accept the revised manual instructions covering the construction of bridges and other drainage improvements on purchaser-built roads. In defense of the men concerned, these attitudes were probably motivated by an impelling desire to get pressing work done without hampering restrictions and the natural inclination which we all have to resist taking on extra jobs when there is so much urgent work and too little time and money to accomplish it. Freedom of expression and constructive criticism should be welcomed and encouraged up to the point where a decision is made. It is even proper to question decisions and instructions after they are issued but it is not proper to nullify them by inaction. It would be unfortunate if the Region, or Station, allowed even a trace of this tendency to mar what is otherwise considered to be a fine performance.

FOREST SERVICE RELATIONSHIPS WITH LOCAL PEOPLE AND COMMUNITIES

We made a special effort throughout the Inspection to meet non-Forest Service people and talk to them about the relationships the Service has with Industry and the general public. In addition to those met in groups at luncheons, etc., we talked individually to more than 71 persons (listed in Appendix 1) in periods of 15 minutes to several hours. There were included top executives of large industries, bankers, editors, legislators, state officials, trade association people, and "common" folks. Labor leaders were unable to meet with us although meetings had been scheduled.

The most unfavorable reaction came from a forest industry leader who insisted that the Forest Service was guilty of chastising Industry, basing its case on obsolete data and misquoting and distorting the true situation while hiding its own faults. This man expressed the belief that such mis-representation was Forest Service top policy, intended to aggrandize this Government "bureau". He stated that if the Forest Service continued to criticize industry that they in turn would seek out and publicize the Service's failure to do an adequate job of managing the public forests. While very critical of the Washington Office, this individual spoke in complimentary terms of the caliber and sincerity of local and regional forest officers. We found in other talks with Industry men that they resent any self-righteous tone in any Forest Service publicity, and especially so if it comes from the Chief's office. Speeches, news items, and reports are scrutinized by these people for things of this nature. The 1947 GII report made the point that Forest Service publicity was unconsciously smug in its tone. We made no study of recent releases but we found that I&E, and the others, too, are well aware of the accusation and try hard to avoid it. This is good and must be continued with unabated effort.

The feeling of the other people seemed unanimous that the Forest Service is doing a fine job. All wished that it had the men and money to do more. One former editor (Marshall Dana) said our men were not sufficiently "publicity conscious" but we doubt this. Such things can easily be overdone.

No longer does the Forest Service dominate the conservation education field in the Pacific Northwest. Gradually a host of governmental, private, and corporate agencies have become very active in telling of and demonstrating conservation needs and of the part their agency plays. This is a good thing but it raises a challenge with the Forest Service. It requires that our men be ever better equipped mentally and mechanically if they are to effectively provide leadership in the conservation field. Training our men to increase their effectiveness is recognized as the answer and the I&E Division is conducting special training meetings (two-day meetings on 10 forests since 1950); participating in new employees orientation meetings; in cooperating agencies meetings; etc. At such training meetings emphasis is given to good day by day human relations. We urge that such efforts be sustained.

The 1947 GII asked that work be done to improve public understanding of a wide range of our activities, such as the long range effect of over-cutting national forest timber to aid specific localities; damage from over-population of game; possibilities of multiple use of watersheds; the real status of forest resources in the Pacific Northwest; and several others. Any one of these could consume all of the Region's public relations efforts. Progress on them was demonstrated and we felt that a balanced job is being done by the Regional Office, and local offices are relied upon to handle problems of special local interest.

State Forester Webster told us that some of his cooperators said the Federal part of the CFFP program was played up too much and the State not enough. Oregon Forester Spaur definitely said that he did not feel this was so. Possibly the complainants told this to State Forester Webster as a minor protest that the CFFP is progressing ahead of the "Keep Green" movement. We do not consider this a serious complaint. It is, however, another indication that the Service must constantly emphasize the local aspects of any publicity.

The Region and Station have emphasized the formation of advisory councils, increased activity in signing demonstration areas on the forests, better showmanship in offices, increased activity in work and publications for educators. It points with pride to its work with schools but says it needs more material from the Washington Office suitable for such use.

The 1947 GII said that the men in National Forests and in Research do not feel to be part of a single organization, and that people outside the Service often do not understand that Research and National Forest people are a part of a single Service. We saw no current evidence of this. To maintain this feeling of unity and understanding is a continuing job, especially on the part of I&E insofar as the general public is concerned. They have been working at it successfully.

Recommendations

1. Continue I&E training sessions on forests. Stress how to meet and cooperate with the "competition" of other workers in the conservation field. Give definite guidance on mistakes that can result from misguided enthusiasm, or the "holier than thou" attitude which can arise at times.
2. Continue setting up and working with local advisory councils, using experiences with existing ones as guideposts for selecting personnel and operating procedures for new ones. Make special effort to maintain balance between various interests. (Don't overlook Labor.)
3. Stress at all appropriate times the fact that Research and Administration are but parts of a single organization.

INSPECTIONBy the Chief's Office

The previous GI Inspection was in 1947, an interval of six years instead of the prescribed five.

Before the GI Inspection began the functional inspection reports made by the Chief's Office personnel were analyzed as to frequencies and contents. Standards required 37 general functional inspections by 18 Divisions during 1947-53. Four were not made; four divisions made 5 extra. Twenty-four limited functional inspections were made but four were not followed with written reports. Sixteen special trips of a get-acquainted, trouble shooting, or stopover nature were made, but seven of these were not followed by reports.

In general, the form and content of the reports were good but some were weak because they lack clear-cut statements of (a) reference to the previous inspection or showing it was reviewed before the new trip started; (b) conclusions; (c) recommendations; and (d) written provision for follow-up. In a few cases there was confusion as to whether a GFI, LFI or a Special trip had been made. (For details see tabulation in Appendix I.) Because of their definite nature special mention is due the reports of Fire Control, Recreation and Lands, Fiscal Control, and Operation.

In view of the weak nature of some of the reports, the failure to write reports and some failures to meet frequency standards, this is not a good record.

By the Region and Station

From the overall viewpoint the Region and Station are meeting inspection standards adequately. A tabulation showing this is in Appendix I. The 1953 GFI for Operation corroborated this, finding that frequency was 82% of required standards which is about equal to the percentage of the base being financed. In a few cases, as mentioned in Fox's report of 5/5/54, inspections were not followed by written reports.

We read carefully the reports of inspections made of the Research Centers' work in 1952-53 by Director Cowlin and others. The reports were of a concise (10-12 pages), clear and definite pattern, pretty much similar in format and general subject matter. Inspections by Kistler, et al, on fiscal matters and building maintenance are also current. His reports are 1-3 pages long and of much lighter character, but adequate for their purpose.

We reviewed three of the six GII reports made of the forests by Assistant Regional Foresters in 1952. With due allowance for the personal characteristics of the Inspectors, the reports pretty much conform to a definite pattern. Usually each section of the report begins with a definite statement of objectives and then discusses the current situation in their light. The format and basic organization is good, and they avoid being a series of functional inspections. The interval between inspection date and report date was not great.

Worthy of comment is the Region's practice of holding a forest workload conference prior to a GI inspection, and after the report is written, of reviewing it at a conference of the Supervisor, Regional Forester, and others. This review "nails down" the salient points of the inspection's findings by making a part of the report a two or three page "Summary of Points of Agreement Reached During GII Review on _____, 195X." This is a tight system which seems to be functioning well.

In an effort to raise inspection skill generally, a three day seminar on "Inspection" was held last April by the Regional Forester and 42 other members of the Regional Office. Judging by the account of it which was prepared and distributed to the forests afterward, this was surely of great benefit. Similar seminars are now planned for groups of forests, but definite dates were not yet set. How to avoid becoming bogged-down in report writing should be emphasized at these. We hope that nothing will be allowed to interfere with getting to the forests in this way.

Follow-up on 1947 GII

The 1947 report made many definite statements and recommendations about things that needed doing or changing. One of the first points of interest therefore, was to determine what the Region had done about these. We found that (a) there had been a good exchange of letters about them as soon as the report was written so that each point was understood by all; and (b) the Region had made a sustained effort to deal with them during the past 5 years. In their discussion of the work as this Inspection began the various men covered specifically their progress on each point. Supporting statements are given in each Division's written presentation in Appendix 2. We believe the Region has dealt with the 1947 GII points as fully as time, men, money, and the priorities of other demands have permitted.

Recommendations

1. The Region should proceed with its plans to hold inspection seminars on groups of forests similar to one held in the Regional Office last April, and Research personnel who make inspections should participate.
2. Current practices of organization and follow-up conferences on forest GII reports should be continued.
3. Frequency standards should not be relaxed and steps should be taken to insure that adequate reports are written and follow-up action taken.
4. The Washington Office should review its inspection practices with the objectives of: (a) making more thorough General Functional inspections and reducing the number of Limited Functional inspections and short Special trips of a superficial nature, (b) providing more definite provision for follow-up, and (c) meeting reporting requirements fully.

TIMBER MANAGEMENT

The estimated allowable cut on Region 6 national forests is 2.7 billion feet (about 40% of the total for all national forests). The actual cut in F.Y. 1953 was 2.446 billion feet and the income was \$38,625,245 (47% of the total cut and 53% of the timber income from all national forests). The cut in calendar year 1947 was 1.5 billion feet. This big and growing timber business is the dominant activity in Region 6 and will continue to be so. The problems connected with it are many and varied. Our appraisal is that in general the Region is doing a good job in handling this business and most of the problems connected with it. There are some deficiencies and many unsolved problems but these are frankly recognized and the Region is attempting to do something about them.

Access Roads and Manpower. The 1947 GII called attention to the need for more adequate financing for access roads and sale administration. Lack of funds to do a fully adequate job of developing and managing the forest properties is still the number one problem. Funds for preparation and administration of sales have increased substantially but have not kept pace with increased volume of business and mounting unsatisfied demands. Access road funds have been entirely inadequate. Only half of the 76 working circles are being cut to full allowable capacity. A few are being purposely overcut in an effort to salvage fire and bug losses. If this were not being done the spread between allowable and actual cut would be even larger.

Pressure for Timber. The last GII recommended strengthening programs to build up public understanding to help withstand pressures to seriously overcut national forest timber. General understanding of the sustained yield concept has increased remarkably both in the public mind and in industry. There has been very little pressure for overcutting but it is still a threat. There is, however, strong pressure from industry and communities for building up the cut to full allowable and for arriving at more realistic allowable cuts. This pressure is bound to increase as the more accessible privately-owned timber is cut out and as the great number of "war spawned" mills in the Northwest become more and more dependent on national forest timber.

Failure of the Forest Service to do a first-class job of management, or to make the commercial timber resources completely available and keep them fully productive could lead to demands to transfer the more valuable timber lands to State or private ownership. A few of the larger timber owning companies are now practicing more intensive management on their lands than we are and are getting more complete utilization than can usually be attained under Forest Service sales procedures. We have partially lost leadership in this field. This progress in private forestry is laudible and should be encouraged in every possible way. However, some industry spokesmen, partly in retaliation for what they call "unjust criticism of industry" and partly because of honest concern over the timber supply situation, are making unfavorable comparisons between forestry practices on the best-managed private lands and the national forests. This is a real challenge and emphasizes the need for attaining our goal of full development and intensive management of national forest timber lands

as soon as possible if we are to retain leadership in forestry in the Northwest and forestall demands for sale or transfer of national forest lands.

Recruiting and Holding Personnel. Another problem of primary importance is that of obtaining and holding adequately trained personnel. In order to meet the impacts of the great increase in timber management work, the Region has decentralized the work to a maximum degree. This is the only way the increased business could possibly have been handled with the money and manpower available. Decentralization requires more competence at the forest and ranger district levels. We have a large number of highly competent men in our field forces but development of a fully competent crew, especially in the sub-ranger positions, has not been possible, largely because of the magnitude of the job and loss of many trained and competent employees to private industry.

Pressure for production has necessitated assignment of heavy responsibilities to new and relatively inexperienced men and has not permitted the desired amount of training and supervision. This is the source of many of the problems experienced in sale administration. It can be corrected in part by training and development of men and tighter supervision which is a main objective of the Region. They are working on it. The situation can also be helped by giving higher classification (GS-9) to TM assistants who have the heaviest responsibilities, as the Region now has authority to do.

Planning and Inventories. Although there has been much progress in management planning and inventory work since 1947, accomplishments are lagging behind the needs. All of the active working circles in the Region are covered with "streamlined" or interim management plans. There are 22 approved comprehensive type forest and working circle plans, all but five of which need revision. Fifty-six plans are scheduled for completion by the end of 1956 but it is doubtful that the schedule can be met. New inventory procedures and simplified management plan outlines have been developed which should facilitate this work. National forest inventory technique, specifications and details are similar to those applied by the Forest Survey so that data collected by the Region and Station are exchangeable. This is a progressive step.

Lack of up-to-date inventories and plans on many working circles is serious because of potential harm to goals of full production and maximum community support. New inventories and plans strongly indicate that existing allowable cut calculations are generally low. The annual allowable cut has been raised from 2.2 to 2.7 billion feet during the past few years. The Region believes it could be raised to at least 3 billion.

Inaccurate information on volume growth and depletion and faulty plans could seriously affect dependent communities. There is danger that low estimates could result in unnecessary abandonment of mills. There is some feeling that this has already happened in a few areas. If this is true or if it occurs elsewhere, serious and unnecessary damage to communities and dependent industries will result. For these reasons inventory and planning work ranks high in priority among the Region's timber management jobs.

Sale Preparation. The pressure of keeping up with the current demands for sales has prevented the Region from getting ahead of the game in its sale preparation work. Most of the initial appraisals are being made on the districts by the ranger and his timber management assistants. Timber sale officers are also taking a more active part in laying out the timber sales, selecting spur trees on west side operations, designating location of spur roads, etc., than was the case 10 years ago.

Rights of Way. The problem of getting rights-of-way across privately owned land into national forest timber sale areas is an essential part of the sale preparation job and is enormously difficult and time consuming. A great deal of time of supervisors, timber sale staff officers, and rangers is going into negotiations--often fruitless--to gain access to national forest timber. Private owners have developed a keen awareness of the value inherent in ownership of adjacent and intermingled land and control of access. Considerable progress has been made in getting recognition of private land owners of the principle that national forest timber should not be offered for sale until there are opportunities for competitive bidding. The Region has also made substantial progress in developing cost sharing arrangements on roads that serve both private and national forest timber, and some progress in making arrangements for use of privately constructed roads in the hauling of national forest timber. However, some owners refuse to grant any form of use on their roads and others demand conditions of use that are unacceptable from a public interest standpoint. There is a strong feeling in industrial ranks that rights-of-way across privately owned land and rights-of-use of privately constructed roads should be temporary rather than permanent.

This whole right-of-way problem is one of the big road blocks to getting full production and it is seriously hampering our timber marketing and sale preparation efforts. The Region has hesitated, wisely we believe, to resort to court action to obtain necessary rights-of-way. However, it will probably be necessary and desirable to condemn rights-of-way in a few of the most difficult cases where equitable solutions cannot be worked out in any other way. In some cases they are attempting to break the jam by surveying and constructing parallel roads. As a general practice, timber is being withheld from sale until rights-of-way can be secured which will permit competitive bidding. Adherence of this policy is placing the Forest Service in a vulnerable position when applied rigidly to area where there is an urgent need for salvage of blowdown and bug-killed timber. We saw several instances where valuable timber was lying on the ground adjacent to existing roads, where there is a demand for it but where the Region has not seen fit to sell it because of their inability to get rights-of-use agreements which would permit competitive bidding for the timber. One example of this was in the City of Seattle watershed where the operating company which controls the roads and the City of Seattle are unwilling to permit other operators to use the road system.

Sale Administration. It is our impression that the Region was putting a great deal of emphasis on improving the administration of sales and in getting compliance with the terms of the timber sale contracts. The weak point in the program is the dependence that must be placed on relatively new and inexperienced personnel to administer many of the sales. A remedy lies in training our sales force on various phases

of timber sale administration and in human relationships.

We found evidence on the sales that the field officers recognize the need for conducting logging in such a way as to minimize soil loss. The Region said that it could not prove that it had made much progress in this regard since 1947 but we saw enough examples of real effort and accomplishment to build roads where they would do the least damage, to drain skid trails and logging spurs, to reseed landings, skid trails and other disturbed areas, and other measures to prevent soil washing to convince us that the Region is becoming erosion conscious. Complete success in preventing soil damage has, of course, not been attained, but the efforts that are being made in the planning and administering of sales with erosion control in mind are encouraging.

Grass vs Trees. The reseeding of disturbed areas on east side timber sales is a source of controversy between timber management on one side and the divisions of range management and recreation and lands on the other. There is no disagreement on reseeding skid trails and roads, landings and similar areas where a distinct erosion hazard has been created by logging. The controversy comes from reseeding grass on disturbed areas which are relatively flat and where there is a question about the erosion control benefits. Timber management men feel that establishment of grass in such areas interferes with, or prevents, tree reproduction. The evidence on the ground is not conclusive and in some cases is contradictory. We saw good ponderosa pine reproduction growing in newly reseeded grass and other areas where reproduction was lacking. There are also many places where grass seeding has not been done where reproduction is unsatisfactory. There are many examples of disturbed areas which are not reseeded to grass that have been taken over by tar weed (a tough competitor) cheat grass, thistles and other undesirable weeds which might be as effective as the reseeded grass in preventing reproduction of trees.

There is a definite need for more research to determine the relationship between grass seeding and tree reproduction in the ponderosa pine areas of the Region. Some studies have been started but they have not yet provided definite answers. In solving this problem, the Region should also be guided by the principle that the erosion control clauses in the timber sale contract are intended for erosion control and not for the production of forage for livestock. If erosion hazard is created by logging it is proper to require the timber purchaser to correct the condition by grass seeding or other means. But in cases where there is clearly no erosion hazard but where it is desirable to plant grass for the major purpose of increasing forage production, such seeding should be financed with range reseeding funds.

Utilization. Utilization in the woods has improved remarkably in the past decade, both on the east side and west side timber sales. This is a reflection of the general trend towards more complete utilization by the industry generally and the increased value of stumpage.

On the Deschutes, Fremont, and Ochoco timber sale operators are purchasing snags and individual bug-killed trees. We were told that the

same thing is happening in other east side forests. In the Douglas fir region it is common practice to make cleanup sales to small operators after the main sales are completed. Gyppos also commonly pick up small patches of blowdown and bug-killed timber and there is a great unfilled demand for this type of sale.

Although utilization has improved greatly there is still a great amount of unused material left in the woods, especially on west side operations. The trend in the pulp industry to use chips and sawmill waste in place of cordwood has resulted in decreased demand for small-sized material, thinnings, broken pieces and cull logs which could be used in pulp production. There is enough of this kind of material to support a substantial expansion in the pulp industry and much of this supply could come from the national forests. The use of sawmill waste in making woodpulp, hardboard and other products is a desirable development in industry. Although it has resulted in less demand for thinnings and logging waste and has had the effect of retarding intensive management of the second growth stands, we see no reason to view this with alarm. It has taken some of the pressure off of the growing forests and eventually the demand for these other sources of wood fiber will catch up.

Despite the advances made in utilization, the FS and the timber-using industry in the NW are still confronted with a major job of getting better utilization of both sawmill and woods waste. It is largely an economic problem. Our FUS unit has contributed to the advance of utilization and still faces a major challenge in promoting the use of the material now wasted.

Cutting Practices. The trend in the ponderosa pine forests is strongly in the direction of lighter cuts and shorter cutting cycles. On the Deschutes we saw sanitation salvage sales where 8 to 12% of the stands were being cut. In regular sales the practice is to aim for initial cuts of not to exceed 30 to 40%. The intensity of cutting is governed to some extent by accessibility and the cost of developing roads but in general the Region is pursuing the objective of getting over the virgin timber with an initial light cut to remove the most decadent and vulnerable timber as rapidly as possible. The Region is to be commended for this progressive development.

On the west side the general practice is to clear cut by patches with patches ranging from 10 to 60 acres. Under this system it is possible to direct the cutting into patches of timber which are most in need of cutting, to minimize soil losses and fire hazards, and to get speedier development of road systems into the various working circles. Patch cutting also insures more rapid and positive natural regeneration. However, there are some objectionable features to this kind of cutting, the most serious of which is the problem of windthrow around the exposed edges. Some segments of the industry are critical of patch cutting and are pressing for larger clear-cut areas. They use the argument of excessive windthrow, increased development costs per thousand board feet of timber logged, and increased logging costs resulting from more and longer moves of equipment, etc.

It was our impression that the cutting of Douglas fir and associated species in relatively small clear-cut patches is a sound development and should be continued. There is need, however, for greater care in locating the boundaries of cutting areas so as to minimize windthrow and soil washing, and to reduce the difficulty of slash disposal. We also question whether in some cases the Region has not gone to an extreme in cutting small patches from the standpoint of economy of operation and the time required and cost to the Government in laying out and administering the extremely small patch cuttings. This question is especially pertinent in those cases where the Region is following the practice of planting the cut-over areas immediately after cutting instead of waiting for natural regeneration. In such cases the argument that patch cutting is needed to secure reproduction is nullified.

Regeneration. Other reports to the contrary, the Region and the Station are "reproduction" conscious. The men we met are fully aware that restocking must be secured if they are to claim a satisfactory job of management. We found no evidence of complacency regarding this important problem.

Most west side cutover areas are restocking successfully but there are enough failures in localized areas and delay in restocking due to climatic factors and infrequent seed years to cause genuine concern among forest officers at all levels. Failures are most common on harsh exposed sites, and in areas where brush competition is severe. The Station has conducted research on Douglas fir regeneration for many years and is now directing more of its effort toward research on such problems. All west side forests are taking K-V deposits for the purpose of replanting areas which do not restock naturally within a reasonable period. Some forests, especially those confronted with brush problems--as on the Olympic and Siuslaw--are planting immediately after cutting and slash burning in order to get the jump on the brush.

The threat of successful plantations being ruined by brush competition is very serious in places. Unfortunately, the brush threat is generally greatest on the most productive sites. On the Waldport District of the Siuslaw we saw approximately 3,000 acres of plantation doomed to failure a few years ago which had been released by aerial spraying in 1951 and 1952 to kill back alder. This cost about \$5.00 per acre versus \$15 to \$30 by hand methods. A satisfactory reduction of brush was attained. The ranger feels that trees on this high-quality site will recover from the serious stunting suffered while shaded and will rapidly grow into a valuable stand. This is the largest chemical brush control project attempted by the Region but we saw a number of experimental plots being worked by Research.

Since planting in some areas is futile if brush is not controlled, the amount of attention this is now receiving is fully justified. Fortunately brush is not a menace on all forests or on all sites on the forests where it is a major problem. On some sites brush in moderate quantities aids regeneration by holding soil in place and protecting the new trees.

Regeneration problems are particularly perplexing in the ponderosa pine types because there are so many adverse factors to contend with. Climatic conditions are a serious factor in most years. Rodents which eat the seeds and destroy seedlings are factors nearly every year. Porcupine damage is perhaps the most serious single adverse factor. The Region feels that the total damage by porcupines to reproduction and saplings possibly exceeds the combined damage by fire and beetles in the ponderosa pine stands.

Since the establishment of the Bend nursery some 12 years ago, the Region has been gradually expanding its planting of ponderosa pine. This effort is directed at planting non-restocked old burns and sweetening understocked stands of natural reproduction. Techniques have been improved to the point where planting is reasonably successful.

The Station and Region and the two State Forester departments have done considerable experimental work in poisoning rodents in advance of natural seed fall and in direct seeding from the air. Most of this work has been done in the Douglas fir region, but some rather extensive trials have been made in the ponderosa pine, the latter with indifferent success. This work should be pushed because the need for successful techniques is urgent. Success from direct seeding has not been great in the national forests so far but the State of Oregon feels its success on the Tillamook burn is sufficient to justify its having seeded 33,000 acres in this way to date.

Insects and Disease. The seriousness and extent of insect epidemics has been greater during the past five years than in any other period in the history of the Region. Disease has also assumed greater prominence or at least has been given greater recognition. The Region, in cooperation with the States and private owners, accomplished an outstanding job in bringing the vast spruce budworm epidemic under control in most of the areas which were threatened. The budworm still remains a problem in a few areas in the Blue Mountains. One of these remaining islands will be treated this year but the balance of the epidemic areas will have to wait until finances are available.

The Douglas-fir bark beetle epidemic, which was stimulated by the blow-downs of 1950-51, shows evidence of tapering off in practically all areas except on parts of the Siuslaw. A big part of the Region's timber sale and road building efforts will be directed toward accomplishing the salvage of as much of this material as possible in 1954 and 1955.

Ponderosa pine beetles continue to be troublesome but there are no serious epidemics and the Region is making commendable progress in getting timber sale operators to pick up scattered bug-infested trees and in changing cutting practices so as to harvest a maximum number of high risk trees.

Needle blight in ponderosa pine is a serious and growing problem. No control is known. All that can be done is to minimize the losses in salvaging affected trees.

Forest industries are showing increased concern over disease and insect losses and there is growing pressure from both small and large operators to capture the losses through stepped-up salvage operations. Lack of access is a bottleneck in many places but there are opportunities for doing much more salvage work than is being done in areas that are now accessible. Salvage sales are more expensive to administer than ordinary timber sales and lack of man power is hampering efforts of the Region to increase salvage cutting.

Sustained Yield Units. We spent one day on the Shelton Cooperative Sustained Yield Unit and one day on the Lakeview Federal Unit. The Shelton unit is working out satisfactorily. Cooperation between the Forest Service and the Simpson Logging Company is good. Periodic meetings are held with Company officials to review progress on the unit and to work out mutual management problems. Community support has been expanded and there is a general public acceptance of this unit on its merits. The Company is doing more intensive management planning on its lands than it is possible for the Forest Service to do. We heard no criticism of the Shelton unit although it is known that organized labor and some segments of the timber industry are critical of this project and other cooperative unit proposals.

The Lakeview unit of course has popular support in the Lakeview area and we heard no criticism of the unit outside of that community. However, we know that the people at Willow Ranch disapprove the unit and will not let the issue die. The Region feels that the unit helped attain prompt harvesting and utilization of timber blow down during the winter of 1950 and in getting prompt salvage of all timber killed by fires in 1951. Increased utilization has been accomplished by:

- A. The lumbering plants supplied by timber from the unit have expended over \$1 million in 1951 and 1952 in capital outlay for improvements at their plants. These improvements include a glue-up plant for utilization of small waste pieces, dry kilns, lumber storage sheds, new machinery, and specialty product equipment.
- B. Intensity of utilization on regular sales has been increased by bringing to the mill smaller pieces, lower quality snags, blow down and other salvage material.
- C. Salvage sales consisting entirely of dead or dying trees amounted to nearly 6 million board feet in 1952 and the first half of 1953.
- D. An increasing proportion of white fir has been included in regular sales.

In 1952 the labor expended on lumber manufacture beyond the green chain amounted to 10 man hours per M board feet. This is a substantial increase over the amount of time spent on remanufacturing and refinement prior to establishment of the unit. It is twice the number of man hours set up as a minimum requirement in the policy statement for the unit. There has been very little competitive bidding for timber since the unit was established. However, the mill capacity exceeds the allowable cut by 50% and more competitive bidding will probably come into the picture as the small amount of remaining private timber is liquidated.

Forest Management Research

The 1947 GII recommended expansion of forest management research and closer coordination between Research and Administration on timber management matters. Substantial progress has been made in both fields. The technical staff engaged in TM research has grown from 4 in 1946 with an allotment of \$25,000 to 22 with an annual allotment of \$150,000 in 1953. Six new experimental forests have been established. Two others have been activated for the first time and work has been strengthened at three additional experimental forests. A research program has been initiated for the spruce-hemlock, the mixed fir-pine, and the Port Orford cedar types which had formerly received only superficial attention. A strong program of research on the management of young growth Douglas-fir has been started in the Puget Sound Center in cooperation with forest industry. Research on old growth Douglas-fir has been strengthened and centered at the H. J. Andrews Experimental Forest. East side ponderosa pine research has been revived on a continuing basis with the major effort concentrated at the Deschutes Research Center.

We were impressed by the immediate value of some of the findings. For example, practical values are obvious of the findings that losses from blowdown along the edges of clear-cut areas on the west side forests can be minimized if the lee edges and the north and east edges and corners are located to take advantage of topography, natural openings, cutovers, young stands, etc. Another example is the experiments in commercial thinning in young sawtimber stands which will produce usable results in a relatively short time.

Coordination with Administration. The administrative men and the research personnel are working closely and harmoniously together. A great deal of the research is directed at the solution of the most important and difficult administrative problems such as the regeneration in the major forest types, study of blowdown and logging methods in second-growth Douglas-fir and ponderosa pine, and problems of converting old growth Douglas-fir to managed forests. The Station is to be commended for taking the initiative and for the progress made in studying second-growth stands. There is a great need for knowledge of proper cutting methods in second-growth forests, especially on privately owned lands where the liquidation of old growth has gone a long ways and we will need this kind of information on the national forests more and more as we convert our old-growth stands to managed forests.

Cooperative Research. The Station has made substantial progress in developing cooperative research projects with private land owners. (See list of cooperators in Appendix 1.) One of the big challenges to the Station is to strengthen cooperative research and coordination with other agencies engaged in the field. The State of Oregon is now spending between \$150,000 and \$200,000 annually for forest management research. Several of the larger private companies employ research foresters and the University of Washington and Oregon State College are endeavoring to build up research funds through grants and trusts. Every effort should be made to encourage cooperative studies with these and other agencies, and the Forest Service should take the lead in bringing about coordination of

forest management research efforts by all agencies. The Station recognizes the need for greater coordination and is attempting to accomplish it by forming Advisory Committees, and in other ways.

Important additional Forest Management research needs as visualized by the Station include:

1. An active Regionwide project on forest genetics.
2. Activation of a full research center organization for the Willamette areas with headquarters eventually at Corvallis.
3. Additional financing at the Deschutes Center to permit expansion of research on the problems of management of lodgepole and mixed pine types and at the Puget Sound Center for management research on red alder.

The Station feels that if funds for additional research ever become available genetics research should be given No. 1 priority and we agree because of the large expenditures being made by State, private, and Federal land managers for planting and seeding. Artificial regeneration is bound to increase and it is important that we get a start on development of superior seed and planting stock. In fact it might be well to scrutinize the forest management research program to see whether some current effort is not available, without waiting for an expansion, to apply on forest genetics.

Recommendations

1. Most of the timber management problems in Region 6 are related to lack of finances to do a fully adequate job of access road building and preparation and administration of sales. Therefore, it is recommended that: (a) the Washington Office continue its efforts to obtain adequate financing for these activities, and (b) the Region make a special effort to analyze its programs with the object of finding and putting into effect ways and means of getting the greatest possible efficiency in use of the available manpower and money.
2. The Region should utilize the authority recently given it to establish a higher classification (GS-9) for ranger district timber management assistants having the heaviest responsibilities in an effort to stabilize employment of the sales personnel and provide more promotion opportunities.
3. The Region should analyze its most urgent timber inventory and planning needs and prepare a report which can be used by the Washington Office in justifying requests for increased financing for this activity. It is suggested that the Region and Station consider pooling more of the funds available for timber inventory and the Forest Survey, as was done in Central Idaho and as now being done in Alaska to make the most urgently needed inventories on national forest lands where both programs will benefit.
4. The Washington Office should firm up the right-of-way policy for timber haul roads and get it out to the regions before the end of

this calendar year. In the meantime the Region should continue the course of action which they have been following. However, consideration should be given to relaxing the policy of not making sales until competitive bidding is assured in special cases involving urgent salvage problems when such modification will not jeopardize the general principles we are striving to establish.

5. The Region and Station should jointly study the relationship between grass seeding and tree reproduction in the ponderosa pine areas and develop a definite policy on seeding of grass for erosion control on logging areas and burns.
6. The Region and Station should push the plan already underway on some Forests to take a new look at patch cutting in the Douglas-fir areas to determine whether or not present practices should be modified with special attention to erosion control, natural regeneration, and wind-throw aspects of the problem. This is especially pertinent on Forests where trees are planted immediately following slash disposal.
7. The Region and Station should continue their "heads-up" attack on regeneration problems. Special emphasis should be placed on problems of natural regeneration, rodent control and improvement of direct seeding techniques.
8. Salvage sales should be expanded as rapidly as it is possible to provide manpower to handle this kind of work.
9. In compliance with the policy on Federal Sustained Yield Units and commitments to the House Agricultural Committee, the Lakeview Unit should be re-examined critically to determine whether or not it is meeting the purposes of the law and the objectives for which it was established.
10. Although substantial progress has been made in forest management research there is still a need for strengthening research programs on regeneration, second-growth forest management, management of the so-called minor species, forest tree improvement, and methods of appraising cutover lands.
11. The Station should continue and expand its efforts to develop cooperative research programs and to bring about coordination of forest management research conducted by the Forest Service, State agencies, and private industry.

WATERSHED MANAGEMENT

No less than 112 municipalities receive all or part of their water direct from the Region 6 national forests. Formal watershed agreements have been signed with 17 municipalities. There are 1,896,000 irrigated acres in Oregon and Washington, most of which receive water from the national forests. An additional 4,272,000 acres of land in the two States are adapted to irrigation. The practice of irrigating lands west of the Cascades is growing. The rapidly increasing population in the Northwest, expanding industry, hydro-electric power developments, and the foreseeable requirements for irrigation all emphasize the need for careful handling of national forest watersheds.

Region 6 has been slow to recognize its watershed responsibilities and to incorporate soil and water resource conservation measures in its programs of managing other forest resources. We are glad to report that this inertia has been largely overcome and the Region and Station are taking a much more active interest in watershed management. This is reflected by the following:

1. The keen interest of the Regional Forester and Director in watershed management and watershed management research.
2. The incorporation of erosion control clauses in timber sale contracts and special use permits.
3. The active concern displayed by many rangers and other forest officers over soil washing resulting from road construction, logging, fire and improperly managed ranges.
4. Action taken by the Region to relocate a section of road on the North Umpqua when it became obvious that the original location would damage the stream.
5. The care being taken in locating roads and supervising logging on the City of Corvallis watershed on Mary's Peak.
6. The real concern of the forest officers over land slides being caused by improper road location and drainage.
7. The soil survey being conducted in the State of Washington in cooperation with Washington State College which was initiated primarily to get information to coordinate road location and road standards with the erosion potential of different soil types.
8. The training being given forest officers in watershed management on the job and in training schools.
9. The sedimentation studies being conducted in cooperation with the Oregon Fish and Game Commission on the H. J. Andrews Experimental Forest.
10. The zeal with which forest officers have pursued the program of seeding grass on logging roads, skid trails, landings, and disturbed areas on east side timber sale areas.

11. The prompt reseeding of burns with grass and tree seed which we observed on the Fremont.
12. The concern which is being exhibited over soil washing on timber sale areas on west side timber sales following slash burning.

These and other developments and actions strongly indicate that our men in the Pacific Northwest are now taking their watershed responsibilities seriously and are trying to do something about them. A great deal more remains to be done and there is a lot that we do not know about proper methods of erosion control and watershed protection in the Northwest. Mistakes are still being made but the general trend in thinking and action is most encouraging.

Logging on Municipal Watersheds

The Region is to be commended for its accomplishment in getting the cities of Corvallis and Port Townsend to agree to logging on their watersheds on Mary's Peak and Big Quillicene Creek. The Forest Service is definitely on the spot to do a good job. A convincing demonstration that these two watersheds can be logged without adversely affecting water supplies would go a long way toward opening other municipal watersheds to timber harvesting. The city of Seattle watershed on Cedar River provides a convincing demonstration that forest management is compatible with good watershed management. However, soil and site conditions in this watershed are such that the results cannot safely be applied widely to other municipal watersheds in the Region.

Mission Creek. Mission Creek watershed on the Wenatchee is the only project in the Region under the small watershed program. Plans for watershed improvement include relocation and improvement of roads and road drainage structures and the planting of trees and shrubs on eroding slopes. This watershed was seriously over-used in the past and has been a critical area for many years. Domestic livestock grazing and logging have been excluded, winter game populations have been reduced by special hunts, and there have been some experimental plantings of shrubs and trees. Marked recovery has occurred in the last few years. We received the impression that the Region's plans for road betterment on this touchy watershed are entirely too ambitious. In our opinion road betterment should be confined largely to improving drainage and reconstruction of bridges and culverts which are causing trouble. New excavations should be kept at a minimum and any work on the roads should be carefully supervised to avoid disturbing road and stream margins. There is a need for planting trees and shrubs and grass on unstable slopes and major emphasis should be put on this work. Control of big game continues to be an important management problem.

Recommendations

1. The Region should continue the drive which has been started to give proper emphasis and attention to soil and water conservation as an integral part of its land management job. Special attention should be directed to:
 - a. Road location and construction as they relate to sedimentation
 - b. Control of logging practices through enforcement of realistic erosion control clauses in contracts. The relationship between size of clearcut areas, and erosion hazard should be analyzed.
 - c. More intensive training of resource managers in the watershed phases of the job.
 - d. Continued close coordination between Administration and Research on problems of mutual interest.
2. The project plans for Mission Creek should be reviewed and revised if necessary to insure that the work does not open up new sources of silt.

Watershed Management Research

The 1947 GII called attention to the need for watershed management research and the almost complete lack of attention to this activity. Watershed management research continues to be one of the most neglected activities but a start has been made to correct this. In 1949 a flood control survey group was assigned to the Station to work on the Columbia Basin Survey. This group was able to make some short-term studies and install precipitation and stream gauges as forerunners of long-term investigations. These are now in operation on the H. J. Andrews Experimental Forest where a series of small experimental watersheds have also been set up and form a nucleus for an expanded program there. The Flood Control Survey organization was made a part of the Regional Office last July pursuant to Secretary's Memorandum 1325 and the consequent shifts of the work in the Chief's office. The Columbia Basin activities are scheduled for completion by the end of the fiscal year.

In 1952 the watershed management research position (Dunford) was set up in the Division of Forest Management Research. Dunford has been engaged in analyzing the watershed problems in the Region and laying the groundwork for a research program. He has been working closely with the administrative men on such things as planning and supervision of road construction and logging on Mary's Peak and similar administrative problems. Here again, close team work between administration and research is very evident. Problem analyses made by the Station indicate that problems of water quality are more serious than problems of water quantity in the Pacific Northwest and that the greater part of the research effort should be directed toward solving water quality problems. The analyses also

showed that lower water quality stems from four main sources of soil disturbance, namely, roads and trails, logging, grazing, and fire. A complete program of research should be designed to cover about 40 specific questions of major importance. To do a full job on them would require an annual research appropriation of about \$175,000. Under the current outlook for appropriations, it is unrealistic to believe that this program can be fully implemented in the near future, but it is strongly recommended that the Region and Station and the Washington Office do everything possible to strengthen the watershed management research in the Pacific Northwest.

RANGE AND WILDLIFE MANAGEMENT

Range Management

In the 1937 GI Inspection Loveridge and Peirce called attention to the serious overstocking and poor condition of many Region 6 ranges, widespread complacency over the range situation, and the need for vigorous corrective action.

The 1947 GII and the thorough functional range and wildlife inspections by Dutton and Swift in 1948 disclosed insufficient progress in handling the range resource and some complacency.

Great progress has been made in correcting overstocking by livestock since 1937 and substantial gains have been made since 1947 as shown in the following table:

	: Cattle & Horses :		: Sheep :		: Total A. U. M. (5 sheep = 1 cow)
	: No. :	: Animal :	: No. :	: Animal :	
	: Months :	: Months :	: Months :	: Months :	
1. <u>Actual Use</u>	:	:	:	:	:
1937 *	: 99,750:	459,855	: 622,145:	2,109,487:	880,750
1947	: 88,039:	405,493	: 241,874:	778,905:	561,274
1953	: 84,513:	361,977	: 168,340:	528,180:	467,613
Change since '37	: 15,137:	97,872	: 453,805:	1,581,307:	423,147
% Change since '37:	-15% :	-21% :	-73% :	-75% :	-48%
Change since '47	: 3,526:	43,516	: 73,534:	250,725:	93,661
% Change since '47:	-4% :	-10.7% :	-30.4% :	-32.2% :	-16.3%
2. <u>Non use</u>	:	:	:	:	:
1947	: 10,297:	44,937	: 107,567:	283,974:	121,732
1953	: 8,291:	34,183	: 21,137:	62,923:	46,768
Change since '47	: 2,006:	10,754	: 86,430:	221,051:	74,964
% Change since '47:	-19.5% :	-23.9% :	-79.9% :	-77.8% :	-61.6%
3. <u>Actual Use and</u>	:	:	:	:	:
<u>non use</u>	:	:	:	:	:
1947	: 98,336:	450,430	: 349,441:	1,062,879:	682,006
1953	: 92,804:	396,160	: 189,477:	591,103:	514,381
Change since '47	: 5,532:	54,270	: 159,964:	471,776:	167,625
% Change since '47:	-5.6% :	-12% :	-45.8% :	-44.4% :	-24.6%

*Includes livestock on portion of Colville transferred to R-1.

Highlights

1. Livestock use has decreased about 48% since 1937 and 16.3% since 1947.
2. Obligations have been reduced by nearly 25% since 1947.

3. The big reduction has been in sheep use--down about 75% since 1937--32.2% since '47. Sheep obligations are down 44.4% since 1947. The decline in sheep use on the National Forests is due in large part to economic conditions during the World War II and post-war years but the Region should be credited with a good job of taking advantage of the situation in making and holding needed adjustments.
4. The table does not fully reflect the adjustments made on cattle allotments. There has been a shift from sheep to cattle on many ranges. Pressure has also been taken off some cattle ranges by adding suitable parts of vacant sheep allotments.
5. Livestock grazing is a diminishing use in the higher parts of the Cascades. Some ranges are closing in with brush and tree reproduction. Sheep grazing has passed out of the picture on the Mt. Hood, Willamette and Umpqua. The Chelan and Wenatchee are down to approximately 10,000 head each with enough range so that most usable areas need be grazed only every other year. The Gifford Pinchot has only 8 bands remaining, the Snoqualmie is down to around 3,000 sheep and the Rouge River to about 2500.

Allotment Analysis. From 1948 through 1951 allotment analyses were made of all grazing allotments in the Region. Most of the corrective actions recommended by these analyses have been put into effect. The Region now recognizes that in many cases, particularly on cattle ranges, the corrective action was insufficient to bring about the desired improvement in range condition. In general, the sheep ranges are considered to be conservatively stocked and on an upward trend. Judging from the samples observed on this inspection, we check with the Region on both scores.

Training. Seventy forest officers on east side forests have been given training in allotment analysis and the "Three Step Method." Transects are being established on all problem ranges, including big game problem areas. This is off to a good start. This training program is proving of value as a brake on over-optimism. If there is any serious complacency in the Region over the range situation, we failed to detect it.

Region 6 is short of district ranger candidates with interest and experience in range and wildlife work. Staffing at the supervisor level has improved and there are now Range and Wildlife staffmen on all east side forests who are capable of training rangers in these activities.

Diary analyses show that on the average, rangers are devoting a greater percentage of their time to range use than they were in 1947. Yet on some forests the overpowering demand for timber is still preventing local officers from spending as much time on range and wildlife management as justified.

The way to overcome this is through more effective use of time, training and careful selection of candidates for positions on grazing forests.

Range Reseeding. The reseeded areas which we observed--pastures, logged areas and burns--provide a convincing demonstration that reseeded to restore depleted ranges and to reduce erosion on disturbed places can be impressively successful when the job is carefully executed. The findings of Research and the results of reseeded of 48,000 acres of range between 1945 and 1952 has yielded good knowledge for the selection of species, soil types, locations, etc. Based on this, enough successes can be expected to justify future expenditures on the 300,000 acres which should be seeded. In selecting among areas offering equal probabilities of success, the policy has been to choose the better sites which are so located that relatively small areas will afford relief for large grazing allotments. We agree that this makes the limited funds yield the most in production of beef and relief from overuse.

The major job ahead on livestock ranges is rebuilding productive capacity of ranges which are still in unsatisfactory condition and producing forage below their potential. This includes a majority of the cattle ranges. There is still a long way to go in getting satisfactory management of livestock on the range although there has been improvement in this respect. Improved management of cattle ranges, especially, requires more fences and water developments. As in all regions, progress in getting such improvements has been much too slow.

The Region recognizes that many allotments still need reductions in numbers and seasons before recovery can be expected even under improved management. Such adjustments are being made on a selected case basis, keeping their shots scattered in an effort to avoid organized opposition. This is sound strategy under the circumstances.

Wildlife Management

Relationships with the two State Game Departments are excellent--a great improvement in the last 10 to 15 years. The Region feels it can go to the Departments and get help on most any problem, and men of the Departments said they enjoy similar relations with the Forest Service.

Over-populations of big game, discussed at length in the 1947 GII, are still a major problem despite more general public recognition of big game range problems and adoption of liberalized hunting regulations. Both States are now taking the lead in advocating and setting up either sex hunts on problem areas. This is a far cry from the time when the Forest Service had to force the issue and face the brunt of public criticism of efforts to reduce surplus deer and elk in the 1930's and early 1940's. The Region can claim much of the credit for the general public enlightenment which permitted this liberalization. All hands recognize, however, that maintaining these liberalized kills will require continued resistance to the old conservative attitudes.

Although the Region and States have made substantial progress getting public acceptance of the principles of big game management and have accomplished some herd reductions the mule deer and elk herds have continued to grow on most of the east side forests. That the problem is far from solved is illustrated by the following table:

	Mule Deer	Blacktail Deer	Elk
1. Estimated Numbers:			
1937	123,000	52,800	28,500
1947	156,000	67,000	21,000
1953	219,000	66,000	49,000
2. Change since '37 :	✓96,000	✓13,200	✓20,500
	78%	25%	71.9%
3. Change since '47 :	✓63,000	-1,000	✓28,000
	40.4%	1.5%	133%

The large increase in elk since '47 is particularly alarming. There is still strong sentiment, especially in Oregon, for maintaining or increasing the elk population. This is a major problem.

The oversized herds of mule deer and elk, in combination with other factors, have depleted and in places destroyed the browse. Overuse by game animals is still one of the major range problems in Region 6. The solution lies in reducing the herds to the size of the winter feed supply through increased harvest by hunters and then taking positive steps to rehabilitate browse ranges. There is an urgent need for expanded research on management and rehabilitation of browse ranges. A small start has been made on browse harvest studies at Starkey. This work should be expanded. The State Game Departments are interested in research on browse and the Region and Station should explore the possibilities of cooperative research with the States.

Asportsmen's movement to restore browse is being assisted by the Region, but more as an educational program and without too much expectation of direct benefit "out in the browse."

Management of blacktail deer on west side forests offers a unique opportunity to the Forest Service and the States. The deer population has been relatively light and fairly stable. Patch cutting of mature Douglas-fir should improve the deer habitat and result in increased hunting opportunities closer to the centers of population. This should help meet the growing hunter demand when the mule deer and elk herds are reduced to the point necessary to rehabilitate east side browse ranges. It is important that blacktail deer management be established on a sound basis as soon as possible.

The Region has been slow in taking adequate action to prevent damage to fishing waters by logging and road building activities. This is being corrected and there is a greater awareness that protection of watersheds is synonymous with protection of the fishing resource and that soil protection must be provided for in sales contracts. This is an important advance but will require constant attention.

The Region is aware of many opportunities to improve fishing through construction of new lakes, stream improvements, and trails to remote

places, but it recognizes that little can be done in this regard except as funds spent for other functions yield these as a by-product or through cooperation with the States. It encourages locally-financed projects--as on the Ochoco--when opportunities arise.

We were told that some forest officers, pressed by heavy timber management loads, feel that wildlife work is a necessary evil, and unless some special problem exists they lose interest. To combat that and to make the limited time available more effective the Regional Office is urging greater participation in game census work, in show-me trips with State men, in getting one active wildlife project set up on each forest, and in more contact work during hunting season. Completion of limited game management plans for each forest is a 1955 goal.

Range Research

Range Research at the Pacific Northwest Station has been reorganized and strengthened since the 1947 GII. The work now under way is largely new since 1947. Greatest effort is being placed on management studies and most of this is concentrated at Starkey Experimental Range. Range re-seeding, relation of logging to grazing, condition and trend studies, chemical control of undesirable plants, browse utilization and prescribed burning in the ponderosa pine type are getting some attention but it is far from adequate to meet the needs for range research in the Region.

Highest priority needs for expanded research include:

1. Refinement of condition and trend standards.
2. Browse management studies.
3. Brush control and revegetation of the large areas of public domain and privately owned spring-fall range.
4. Economics of range improvement practices.
5. Relationship of grass seeding and tree reproduction--a lively topic in Region 6 at present.

In all of this there is a need for more fundamental research to increase the store of basic ecological knowledge of the range. Most of the past and current research efforts are empirical and stop short of answering why the effect was obtained.

The Starkey range is an excellent study area. It is typical of much of the Blue Mountain country and includes most of the common problems of that part of the Region. More funds are needed to complete planned fencing and to provide more adequate facilities for the personnel. There is a fine opportunity here to conduct hydrologic studies on small watersheds subject to different types of management. We recommend that this be undertaken as soon as finances permit.

As a minimum the Station needs an additional man at the Mid-Columbia Research Center to work on range problems in Washington and a range specialist at the Deschutes Center to work on range and game problems on the Deschutes, Fremont, Mt. Hood, and Ochoco Forests.

Cooperation between the range research division and national forest personnel has been good. Research men have participated actively in condition and trend training sessions, a range clinic, game conferences, reseeding demonstrations, etc. This teamwork is paying off and of course should be continued and strengthened where possible.

Recommendations

1. The Region, with Washington Office help, should import more men with adequate balanced knowledge of range management for assignment on important range districts. This could be accomplished by exchanging timber management trained men from Region 6.
2. Greater emphasis should be placed on getting better management and range development. More of the burden of range improvement and reseeding on permanent type ranges should be shifted to the permittees, in line with present policy.
3. Where it is obvious that unsatisfactory range conditions cannot be corrected reasonably soon by improved management and artificial restoration measures, necessary reductions should be planned, scheduled and put into effect in a plan wise manner in line with policy changes which became effective in December 1953. Adjustments in numbers and seasons should, of course, be preceded by thorough analysis and each case should be well prepared and supported by facts.
4. Cooperative efforts with the States to balance big game with available forage should continue. Research on management of browse should be continued and possibilities of expanding it in cooperation with State agencies should be explored.
5. As soon as finances permit range research should be expanded in eastern Washington and extended into the Deschutes Work Center. Possibilities of financing sediment and streamflow studies on the controlled watersheds at Starkey should be explored by the Washington Office and the Station.

RECREATION AND LANDS

Recreation Resource Planning. The 1947 GII commented upon the need for more and better forest recreation resource plans. All but two forests now have them completed or well along. Forests with heavy recreation loads also have most of their ranger district plans completed or nearly so. More men are now participating in such planning. The rangers are making the plans for their districts. This is a progressive step as rangers who make plans which require the reserving of timber and the keeping of streams free from silt will do much better in serving those plans when timber sales and other uses are consummated. The Region is doing an outstanding job in planning and managing its roadside strips. Some light selective cutting is being done on important roadside strips and recreation areas such as Metolius to improve the health and appearance of the timber and remove the hazardous trees. A good selling job has been done to get the public to accept this kind of management.

Public Recreation Areas. Region 6 has more than 900 improved camp and picnic grounds. Ten of these areas and 8 winter sports areas each have more than 25,000 visitors annually. Regionwide the recreation use in improved areas has jumped from 482,000 in 1943 to 2,446,000 in 1953. The use has far outgrown the facilities. Crying for attention are the demands for constructing additional facilities at new Federal reservoirs and along new roads, and for developing the hunters camps that were urged by the 1947 GII. The 1952 estimate was that building these new facilities would cost \$5.8 million while to merely rehabilitate what we already have would cost \$2.1 million. Adequate cleanup is estimated to cost \$134,000 and current maintenance \$445,000 more. Last year \$98,000 was available for cleanup, maintenance, construction of new facilities, and for repairs after unusual destruction, as from wind at Cape Perpetua on the Siuslaw.

The Region is doing a good job of cleanup, emergency repairs and patching up its camp and picnic grounds with the limited funds available. With one exception the camps we observed were reasonably clean. They are losing ground on maintenance and replacement of improvements as they wear and rot out.

A large part of the cleanup and repair work is done with contributed time of guards. Road crews and equipment are being used to maintain campground roads. Some roads have been gravelled to solve the dust nuisance. Functional reports have urged that campground roads be blacktopped as a dust palliative. Regional Engineer Grefe convinced us that such a pavement would be costly to maintain unless a properly drained base were also provided. We agree that our scarce funds should not be used for blacktopping campground roads unless it can be properly done and at a reasonable cost.

Efforts to place the more popular campgrounds on a charge basis resulted in limited benefits. Three areas are now on a charge basis and others are available for concessionaire operation which would yield \$500-\$700 in a three to four month period. For so little an income it is difficult to find suitable concessionaires who are willing to do the

required maintenance work. While we recommend that efforts be continued to place more of the larger areas under concessionaire operation, we feel that this method of campground operation can do little more than make a dent in the maintenance and operation problem in Region 6.

Both States have established state parks and roadside areas which furnish recreation facilities similar to ours. In some cases these are newer and better maintained than ours--as Siltcoos versus Honeyman. Yet the over-all demand is so great that these give our facilities no noticeable relief. Negotiations for the States to manage some of our areas--as Cape Perpetua--have gotten nowhere. Nevertheless, such arrangements would be worthwhile where possible, and we urge that such efforts be continued when appropriate.

Winter Sports Areas. Winter recreation is a big and growing business--third in importance only to camping and picnicking. Reports indicate that the Region is doing a good job in managing its winter sports areas and training men to supervise them.

The Region has succeeded in getting the State of Washington to assume an expensive burden for shelter and rest rooms at Stevens Pass. Here the demand in connection with a huge ski area would require the Service to build facilities costing tens of thousands of dollars. As it is, the State has built and will operate a handsomely designed public building. Whoever worked this out with the State deserves much credit for shifting a public burden from Federal to local responsibility.

At Stevens Pass we saw a group of lodges built under Special Use permits by private ski clubs. They were creditably located, designed, and constructed, and presumably are adequate for their membership. This is an outstanding development and might well be adopted by other forests and regions as a method of caring for some of the heavy demands for accommodations at winter sports areas.

Special Use Resorts. The Region is to be commended for its success in solving some vexing operating problems at the most prominent resorts under special use permits. For example, we saw the remarkable success achieved in rehabilitating the former badly operated resort at Stevens Pass. The new building is architecturally pleasing and well constructed. The old building has been moved back and the plans are to rebuild it to harmonize with the surroundings and use it for employees' quarters. The old cabins are being improved. We were assured that the Multnomah Falls Lodge and Timberline Lodge are now being operated under new special use permits with reasonable profits by qualified persons.

Contacts with citizens outside of the Service show a high public concern over Timberline Lodge as a civic asset. They feel that its potentialities would be even greater if less of its bedroom-renting capacity had to be reserved for employees. Construction of employees' quarters is therefore a crying need and they urge that the Service attempt this. The Region does not propose doing so and we agree that expansion at a place like Timberline should have low priority. What little money there is should go to protecting what now exists.

Summer Homes. The problem of meeting the demand for summer home lots is a matter of concern in Region 6. Few surveyed lots remain vacant and a tremendous demand for additional ones exists. Many man-years of time would be required to classify and survey sufficient areas to meet the demand. To develop more of these areas to acceptable standards will require new road construction, continued road maintenance (mostly at Government expense), costly water developments, power line construction, etc.

Considering the demands on the Region's manpower and funds for higher priority recreation activities and other pressing resource management work, it is unrealistic to look for much progress in establishing new summer home groups even in places where such use is desirable and in keeping with current policy. We believe therefore that such work should be given low priority for the present, except in special cases where setting up new areas will clear up some urgent administrative problem as at the Tieton Reservoir.

We saw several summer home groups--as on the Tieton District of the Snoqualmie and on the Metolius River of the Deschutes. The homes were appropriately designed and well maintained. The stream through the Metolius group is closed to trout fishing to prevent fishermen from walking across the lots. This and similar conflicts between private and public use emphasize the need for careful planning of any new summer home areas.

Wilderness Areas. There is great interest in many quarters in the amount of land and timber reserved from cutting--as in the Three Sisters Primitive Area, and the Olympic National Park. Sentiment for and against decreasing these and other areas is very strong. The Region is wisely keeping out of the Olympic controversy. It is facing up to changing the boundaries and reclassifying the Three Sisters and other primitive areas in the Oregon Cascades. Painstaking preparatory work preceded the public announcements of proposed changes which are currently being advertised. Fireworks are to be expected over the reduction of the Three Sisters area. This will be partly offset by concurrent proposals to enlarge and reclassify several smaller primitive areas in the same general vicinity.

Other primitive areas should be restudied and reclassified as rapidly as feasible. The longer this is postponed the more difficult it will be to make desirable changes because of mounting pressures and public sentiment on both sides. It is recommended that a minimum of one reclassification under Reg. U-1 or U-2 be accomplished each year until the job is completed. We believe that the men in the Regional Office and on the forests understand the need for thorough study and carefully laying the groundwork in each case and will proceed accordingly.

Reservoir and Power Developments

Power Lines. Permits to the Bonneville Power Administration and private power companies for transmission lines rights-of-way are big business in Region 6. Large areas are being taken out of timber production in these cleared rights-of-way and at best they make unsightly scars across the landscape. There is little that the Forest Service can do about this

except to attempt to get the rights-of-way located where they will do the least amount of violence to the appearance of the country and to direct the clearing operations so as to cause the least disturbance of the soil. The Region has had some very difficult administrative problems involving disposal of timber, erosion control, road construction on the Bonneville Power rights-of-way. These problems are now on the way toward solution. Some one in the Region suggested that the power line rights-of-way might be used for the production of low-growing crops such as Christmas trees. This idea has much appeal and it is recommended that it be tried out on the more accessible and high-quality sites.

Reservoir Problems. The construction of flood control, power, and irrigation reservoirs has created a large additional workload in the Region. The Army Engineers' activities are centered at present on the Willamette Forest. Detroit and Lookout Point dams caused serious dislocation of a large number of improvements and transportation facilities, and upset the management plans. Good working relationships were established with the Army Engineers and the planned replacement of facilities has been accomplished. The job of supervising clearing operations is a tremendous one. Clearing on the Detroit Dam job resulted in a serious fire and other problems arose. These were largely avoided on the Lookout Point Dam. Two more projects are in the hopper. Cougar Creek on the South Fork of the McKenzie is being surveyed. This will flood out a large area of the highly productive Douglas-fir timber land and will disrupt transportation facilities. The Hills Creek Dam on the Middle Fork of the Willamette has been authorized for construction and is awaiting appropriation of funds. The Region recognizes the need for getting together with the Army at the start and doing everything within its power to make sure that the national forest interests are protected on these projects. Wickiup Dam, built by the Bureau of Reclamation on the Deschutes, has created a serious seepage problem. A considerable area of timber is being killed, at least one forest campground has been partly flooded and forest roads are going to pieces as a result of this seepage. Action is being taken to restore the roads but there is little that can be done to prevent the drowning out of timber.

Upper McKenzie Project. A very disturbing development is the proposal of the City of Eugene to construct a series of dams and tunnels on the upper McKenzie which will virtually wipe out a wild strip of river with beautiful rapids and falls and fine sport fishing. This is one of the most beautiful areas in the entire Pacific Northwest and there is a serious question as to whether it is in the best public interest to permit destruction of high recreation and scenic values in such an area as long as there are other sources of power available.

Numerous other water development projects are under consideration in the Pacific Northwest. Dam building problems are likely to increase rather than diminish and it is essential that the Region be prepared to cope with them.

Mining Claims

Mining claim problems have picked up in the Northwest with the rising values of timber and increased use of the forests for recreation. Most serious complications are in the field of timber management and maintaining access to the forests. We observed one of the most difficult and complicated mining claim problem areas in the Region on the North Fork of the Shoqualmie River. Here, numerous claims of highly questionable validity are blocking access to a large body of timber, causing wastage of timber and requiring an inordinate amount of the time of forest officers to keep a semblance of control. Fighting against the encroachment of illicit mining claims is a discouraging and almost heartbreaking job at times. The Region is taking vigorous action in contesting questionable claims. The assignment of a mineral examiner to work in Region 6 and Region 4 is helping materially.

Within the past year the Region received applications for patenting of about 100 lode and placer claims. These claims are being examined and reported upon. Probably 5% of them will be approved for patent. Others may go to patent over Forest Service protest. The Region estimates that there is an average of \$10,000 worth of stumpage on each of the 100 claims. This is probably conservative as we saw two claims on the Snoqualmie for which patents had been applied which supported about \$100,000 worth of prime timber.

Some progress is being made in solving the mining claim problems. The speculative value of pumice has dropped off. Permission has been obtained from some claimants to conduct timber salvage operations. The Randle pumice claims were declared invalid. There have been other successes as well as set backs. The situation remains tough and is causing a large expenditure of time with generally unsatisfactory results.

Recommendations

1. Efforts should be continued to place more of the larger and most heavily used campgrounds under concessionaire management or to put them on some other basis to relieve the Federal Government of the expense of operation and maintenance.
2. Negotiations should be continued with the States for State operation of forest camps which are close to State parks.
3. Possibilities of concessionaire construction of crew quarters at Timberline Lodge should be explored. If this is not feasible and unless special financing can be obtained through community effort, the Region should not plan on expanding facilities at Timberline.
4. Development of new summer home groups should be given lower priority than other recreation work for the present, except in cases where establishment of new areas will help solve urgent administrative problems.
5. Primitive areas should be reclassified under Reg. U-1 or U-2 as rapidly as feasible with a minimum goal of one reclassification per year.

6. Advantage should be taken of the precedent established by the Libby Dam study in Region 1 as well as past experience with the Army Engineers, Bonneville Power Administration, and Bureau of Reclamation in Region 6 in making pre-construction joint studies and plans to minimize impacts of reservoir and power developments.
7. Until there is conclusive evidence that the proposed development of the Upper McKenzie is in the public interest and that power needs cannot be met from other sources, the Upper McKenzie project and others of the same nature should be firmly resisted.
8. The Region should continue to vigorously protest all questionable claims which come up for patent and that as time permits they should challenge other claims which appear to be located and held for purposes other than mining. The Washington Office should, of course, continue its efforts to bring about desirable amendments in the mining laws.

LAND EXCHANGE

Region 6 has carried out, during the past two decades, a large program of blocking up ownership through land exchange work. Although there has been some criticism of this, it prevented substantial areas of timber from being destructively cut during the prewar years and has resulted in simplifying administration. Some public figures have recognized the value of the exchange program as conducted under the economic conditions which prevailed at the time most of the work was done. The many forest officers who accomplished this can well be proud of their work.

The Region is aware of the Administration's policy against material additions to Federal acreage, but recognizes that many opportunities exist for land-for-land exchanges which will block up both the private and public property. Such exchanges can be helpful in solving serious administrative problems such as rights-of-way, control of trespass, and the intolerable demand for property line surveys which exists on many forests--the Siuslaw for one. To the extent that opportunities and personnel permit, we urge the Region to continue land-for-land exchange work--stressing consolidation and reduced administrative costs in the reports.

The passage of the Cordon-Ellsworth O&C bills makes the Region face a large task of appraising the intermingled lands, negotiating with the counties and Interior and completing the transfers. This is a No. 1 priority job and will require special organized attention to complete it on schedule.

Recommendations

1. The Region should give priority to the blocking up of O&C and intermingled national forest lands during the next two years.
2. As time and opportunities permit, land-for-land exchanges should be continued with emphasis on blocking up properties and thereby reducing costs of administration.

STATE AND PRIVATE FORESTRY

State Foresters' Program

We visited the two State Foresters and a number of their personnel at several field stations. It appeared to us that Federal-State relationships are good and that Forest Service ideas on training, organization, fire disaster planning, etc. are well accepted.

Both States' forestry organizations are changing rapidly from predominately fire control activities to protection and management activities. The Forest Service must keep alert to help the State in meeting their timber management problems. It tries to do this in Oregon by having a representative as an advisory member on the State Board, and in Washington it has close contact with both the State Supervisor of Forestry and with a member of the State Land Board.

In the State of Washington one of the major problems confronting the State Forester is the divided administration of State forest lands. The Division of Forestry is responsible for the protection of all of these lands but has little control over cutting or slash disposal on school and other grant lands. Efforts to get corrective legislation have failed so far but additional attempts will be made. The Region should continue to do what it can in helping solve this problem.

C-M 2 Work. The 1947 G.I.I. made a point of the weaknesses in the Washington State Forester's fire organization and of the attempts being made to dominate it politically by the associations of large owners that had their own protective forces. A personnel change and reorganization in 1949 has improved the situation greatly and corrected these weaknesses. Washington's forces now receive good support from the Protective Association.

In Oregon the private fire control Associations mentioned in the 1947 GII continue. Some of these man and operate fire districts and others now merely collect money and then contract with the State for the actual protection. All of the Associations' Boards of Directors are taking a more active interest in their affairs and we were told that the 1953 legislation providing an emergency fire fund will practically insure that the Associations will receive assistance in meeting heavy suppression costs. Thus these Associations are maintaining their positions, rather than passing out of the picture. There is danger that these organizations might try to dictate policies and procedures purely for their own interests and it would be better if the entire protection job could be done by the single organization of the State Forester. He recognizes this but does not propose to work towards the Associations' dissolution for they are firmly established and do present some advantages.

CFM & C-M 4 Work. In 1947 there were five service forestry projects in the two States; now there are nine. However, this is but a fraction of the number required in view of the opportunities, and additional projects by the State Foresters should be encouraged. Both State and Federal

funds will be required to do so.

Under the 1950 CFM law, the Washington State Forester has started three service forestry projects (two in R-6, one in R-1) and has an agreement with the Extension Service to conduct two others. We visited one of these foresters who is supervised by the Extension Service when we were at Olympia and went to a woodland serviced by his predecessor. This man did not make us feel that either he, or the Extension Forester who directs him, understand the aspects of doing specific on-the-ground service work such as is contemplated by the CFM Act. Instead, he is working largely through group demonstrations, exhibits at fairs, 4-H club work, etc. He struck us as being pretty much an Assistant Extension Forester, paid in part by CFM funds. We also visited the man at Port Orchard who is supervised by the State Forester, and learned that he is sometimes put on forestry tasks that are not strictly of a CFM nature. This matter of keeping these men functioning properly requires continuing and close attention by the Regional Office. The Region should assure itself that the Extension Service men are doing sufficient on-the-ground service work to justify their receiving CFM funds.

The Washington State Forester has a well run nursery producing at reasonable cost several million conifers annually for forest planting. This is independent of the C-M 4 nursery operated by the State College at Pullman. This latter nursery produces mostly windbreak and woodlot stock for farmers at high costs, due largely to poor administration and small output. The Region is putting pressure upon the College to remedy this, and some progress is being made.

This unusual setup under which Washington's State Forester and Extension Service both do CFM work, and he and WSC both distribute planting stock is an outgrowth of the days when the State Forester refused to undertake these programs, so the Forestry Department at WSC took the C-M 4 program, and the Extension Service took the CFM work. The State Forester began to function in these fields later. But today two state agencies doing the same thing for the same class of citizens is bound to lead to confusion and the transfer of both the CFM and C-M 4 programs to the State Forester, as in most other states, is desirable. Currently this is not possible but we think this should be done if proper chance arises.

The Tillamook Burn and the Yacolt Burn. We spent a day on the Tillamook Burn with the two State men most directly responsible for the work on the area. The inaction of the State which prevailed a few years ago has been replaced by an aggressive program of salvage and restocking. Remarkable progress is being made. In addition to the salvage, protection, and planting which we more or less expected to see, we were shown the results of direct seeding from a helicopter. We saw some areas of success and were told of areas of failure. Such reseeding is being done with great consideration of each discernible factor contributing to success or failure. When success is achieved, and we do not doubt that it will be, the State will have learned reforestation techniques that will be of national value.

We see no grounds for anyone criticizing the State as failing to take action. What it has done so far seems well in line with the situation. The principal thing now to be done by the Tillamook Burn organization is to prove its ability to prevent the widespread re-burns that have swept the area several times in the past.

Washington adopted legislation in 1953 enabling it to rehabilitate the Yacolt Burn. An appropriation of \$55,000 for plans and surveys was provided, and the work done will be similar to that on the Tillamook. We will be glad to hear of the progress of this project as time goes on.

Private Land Forestry.

Forestry on privately-owned lands in the Pacific Northwest is certainly on the upgrade. We were impressed by the signs that we saw of genuine permanent progress. For example, the progress in Industry towards more utilization; intensive management plans; long range management; intensified protection, etc. We saw plenty of evidence that the Corporations which are looking forward to indefinite life are taking steps to insure continuous forests on their own lands. We also both saw and heard of small owners managing small tracts, and met people of moderate means who buy parcels for reforestation and management. This does not mean that the battle is won. Obviously, there is far more to do than has already been done and plenty of examples may be found of destructive liquidation, selfish practices, and attempts to avoid the State Forestry laws, but these do not blot out the real progress being made. Here as elsewhere the greatest problem is on the forest lands held by small owners.

We visited Mr. P. Dwight Edgell, Western Land Agent of the Northern Pacific Railway Company. His Company, which has vast forest holdings despite years of an active sales program, no longer sells forest land because it is convinced of the profits to be made by owning forests. This demonstrated to us that in the Pacific Northwest there is widespread faith that private forestry pays.

Foresters Outside the USFS

The number and activities of privately trained foresters working as consultants, or for industry has grown so rapidly that the Region has been pressed to keep informed of their number and progress. It tries to keep track of them because it recognizes the great importance of the consultants to the advancement of good forestry on the lands of the small owners, and especially on the lands of that group situated between those served in a few places by the Service Foresters and those large enough to employ their own technical staffs. The Region feels that it must do all possible to help reputable consultants get established and prove the worth of their services on such tracts. It is doing this by maintaining a list of consultants and their specialties, making referrals when asked to do so, and meeting with them professionally.

Some industries are also making their foresters available to small owners.

Recommendations

1. Insofar as appropriate, advise and assist the State Forestry organization to foresee and meet their problems of changing legislation, policy, and organizational make-up.
2. Keep close contact with Service Foresters administered by the Washington Extension Service to make sure they do on-the-ground service work; not merely act as a local Assistant

Extension Forester. Keep close contact with Service Foresters administered by State Forester to make certain they are not improperly used on "extra-curricular" projects.

3. Keep pressure on Washington's C-M 4 administrators at Pullman to bring nursery costs and output more closely into line with those of sister states.
4. Seize opportunities, if any arise, to put all CFM and C-M 4 work under the State Forester in Washington.
5. Assist landowners in finding suitable consultants, and vice versa, as a means of getting more and better forestry onto the private land.

ENGINEERING

Region Six has the largest and most difficult engineering job in the Forest Service. It is mainly a problem of developing and maintaining an adequate transportation system to protect and utilize the large and valuable commercial timber stands. The importance of this work cannot be overstressed. It is the key to intensive forest management. At the beginning of the fiscal year 1954 it was estimated that 5,155 miles of access roads were needed to bring the harvest up to the allowable cut, 610 miles of which should be built by the Government at an estimated cost of \$28,900,000. Timber purchasers should build 4,197 miles of access road at an estimated cost of \$60,100,000. The balance; 348 miles estimated to cost \$8,900,000, should be built by local road authorities and private timber owners. After full allowable cut is attained it will be necessary to construct 444 miles of road per year at an estimated cost of \$8,600,000 to maintain the cut. About 23% of these additional roads should be constructed by the Government.

Progress in construction of Government-financed roads has been discouragingly slow--only 154.6 miles having been constructed and reconstructed by the Government at a cost of \$10,452,731 since F.Y. 1950. It has been necessary to spend the bulk of the available construction funds on bridge replacement and for engineering services on purchaser built roads.

The Region is doing a far better job of building roads and bridges under both operator construction and Federal financing than 10 years ago. There is still room for improvement and the Region frankly recognizes this. More attention is being given to drainage and soil protection than ever before but we saw examples of erosion problems on recently-constructed roads resulting from poor location and improper drainage.

Purchaser Built Roads. Advance location and supervision of purchaser construction of forest development roads are the heaviest engineering activities at present. During the five-year period, 1948 to 1952 inclusive, timber purchasers bettered and constructed a total of 2,882 miles of road on the permanent system with an appraised value of \$53,708,000. In C.Y. 1952 operators built and bettered 720 miles with an appraised value of \$14,101,300. This represents 71% of the total value of all R&T construction in the Region that year. The Forest Service spent \$367,000 for engineering services on operator roads in '52--about 2.13% of the value of the roads. The Region feels that it should be spending about three times that amount in order to do a fully satisfactory job.

Lack of adequate engineering is responsible for most of the complaints over Forest Service road requirements. Under force of necessity some operator roads are located and supervised by men who lack some of the qualifications required for this work. This has resulted in a tendency to substitute "formulae" for judgment and engineering skill. Another weakness is the use of stereotyped road specifications in timber sale contracts. Still another is lack of understanding among field officers of the road standards and failure to take advantage of the flexibility in the standards in designing roads to fit the topography and hauling requirement on the particular project. We saw evidence that insufficient discrimination was being used in designating roads in accordance with their traffic needs.

That is, in some cases operators were being required to build spur roads to branch road standards which might more logically have been designated as temporary logging spurs.

B.P.R. Assistance. The Region is relying heavily on the BPR for location, design, contract preparation and supervision of the more expensive Federally financed road and bridge jobs. In F.Y. 1953 about 16% of the total road and trail construction funds obligated by the Region was paid to the BPR for engineering services. In that year the Bureau handled 70% of the Region's R&T construction program; \$4,097,060 out of \$5,835,538. Of the amount turned over to the Bureau about 23% (\$950,000) was used for surveys, design, construction engineering, and administrative expense, leaving a balance of \$3,147,000 for actual construction work. This is a heavy price to pay for engineering and while paying it to the BPR we are not getting any benefits in the way of strengthening our own engineering organization. Relationships between the two agencies are generally good but we did hear some complaints from field officers about BPR contracting. We observed two such jobs on the Siuslaw. One was on the Mary's Peak watershed where the contractor was moving more dirt than necessary. The second was the Five Rivers road where progress was very slow due largely to a poorly-financed contractor whom the BPR resident engineer seemed unable to get to operating properly.

Timber operators are critical of the standards applied on BPR contract projects. They do not understand that the Forest Service is responsible for the standards and specifications and that BPR is working for the Forest Service on the jobs we assign to them. Some forest officers do not understand this relationship either.

The Region must continue to rely strongly on BPR assistance on heavy Federally financed projects. The work would be badly crippled if BPR should pull out because Region 6 does not have sufficient technically-qualified engineers to make the surveys and designs, prepare plans and specifications (draw the contracts) and supervise the construction. Some BPR participation is desirable because of the flexibility it provides in handling a fluctuating program. However, the Region should strive to become more independent of the BPR by staffing with qualified engineers so that we can do more of our own work. It would not cost any more and should save money in the long run. It should also result in engineering which is better adapted to Forest Service needs.

Non-timber Roads and Trails. The existing system of "non-timber access" roads and trails is badly in need of a sustained improvement program. Originally built to low standards and receiving insufficient work since the beginning of World War II, they are gradually going down hill. The Region estimates that it would require annual expenditures of \$250,000 on trails and \$1,500,000 on non-access roads for a decade to bring them to a standard that would permit economical maintenance and satisfactory service for administration. Because of the emphasis placed on timber access roads, these other roads and trails are getting even less than minimum attention.

Bridges. In 1945 the Region had 2,000 temporary road bridges. Half of these have now been replaced with a permanent type bridges and culverts and if the present rate is maintained, nearly all will have been replaced by 1960. This is a notable advance and the Region is to be commended for this accomplishment.

In 1952 timber purchasers constructed some 38 permanent bridges valued at about \$568,000 and the 700 miles of operator-built roads had nearly \$2 million worth of permanent culverts in place. The Region's objective of getting timber purchasers to install permanent type drainage structures on operator-built roads is commendable but in some cases they are going beyond our legal authority and the intent of manual instructions (13 FSM 106.23 and 7 FSM 203.11) in requiring operators to install drainage structures better than are justified to harvest the timber under contract. Region 6 chooses to interpret the policy guide lines liberally on the basis that it is in the Government's interest in the long run to build the main roads, including drainage structures, for the most economical transportation of logs for the working circle rather than for the individual sales. Incidentally this problem will largely disappear if we can get adequate financing for timber access roads.

Other Engineering Activities

Mapping. Great progress has been made in the past five years in making 2-inch scale planimetric maps of the 44,000 square miles in the Region most urgently in need of such maps. (See chart in Appendix 2.) The drafting job is holding up completion of some of these maps. The maps are good as far as they go but most of them fall short of meeting the F.S. goal of contributing to the basic series map coverage. However, Region 6 is changing its mapping procedures to conform with the Chief's policy statement of June 25, 1953 and new maps prepared in the future will meet Forest Service standard mapping standards.

Communications. The communications work is progressing satisfactorily. Reasonably good progress is being made in conversion to radio.

Equipment Management. The Region points with pride to the fact that their handling of equipment is changed from a matter of "nuts and bolts" to one of management. Equipment repair work is being decentralized and the Region feels that they can save money and get better service as a result of this change.

Forest Highways. Programming and construction of the forest highways are being aimed at supplementing and serving the development system for timber access. Working relationships with the BPR and the State Highway Commissions on the Forest Highway program continue to be satisfactory.

Recommendations

1. The Region must strengthen its engineering organization by employment of more men with sound engineering training so that (a) the problem of proper location, design and supervision of purchaser

constructed roads can be more adequately met, and (b) more of the work now being farmed out to the BPR can be accomplished by the Forest Service. We consider this to be one of the most important recommendations in this report.

2. The W.O. should study the classification and career ladders of engineers to determine what can be done to make Forest Service employment for this class of employees more attractive. The Forest Service is paying a high price for our failure to recruit and hold capable engineers and for our great dependence on the BPR for engineering services.
3. Until the timber access problem is solved, timber access roads must continue to be given highest priority. Such work as can be financed on the other roads and trails should be placed where it will result in savings by lowering maintenance costs. The balance will have to be on a "hold the line" basis until the timber access problems are more nearly solved.
4. The Washington Office should seek to get clear cut legal authority to require timber purchasers to construct permanent type bridges and other drainage structures designed to serve entire working circles rather than individual sales. Until such authority is obtained the Region should adhere strictly to the manual instructions on this subject.

FIRE CONTROL

The functional inspection made by Gustafson in 1949 and 1951 and by Rasmussen in July 1953 were exceptionally thorough. The reports present a comprehensive, well-documented record of fire control problems and performance in Region 6. Followup on these reports and on the 1947 GII has been good both in the Region and from this office. In general the Region is doing a sound professional job in fire control in the face of some very difficult problems. Some weaknesses have shown up but they have been recognized frankly and the Region is striving to overcome them.

Major Problems

Industrial Operations. The greatest fire problems are those resulting from the vastly expanded industrial activities within national forest protection boundaries--logging, reservoir and power developments, road building and the clearing of hundreds of miles of power line rights-of-way. The major fire losses since the last GII have been related to this industrial expansion. The problem is complicated by the fact that many of the men upon whom the forests have to rely for inspection, enforcement of contract terms and organization of prevention and fire fighting activities on industrial operations are relatively new and lack adequate fire experience. The Region is endeavoring to remedy this through increased training and supervision.

We strongly recommend that the Region continue an aggressive program of giving such training and supervision and also of making transfers to broaden men's experience. Especially we urge detailing as many men to slash burning jobs as can be financed with slash disposal funds. A definite plan exists to send inexperienced men to going fires wherever burning in the Region and for sending some men with greater qualifications to fires in other regions as well. This, and details to slash burning jobs, is an excellent approach to the problem of training men in fire behavior and fire generalship.

Slash. Each year some 25,000 acres of timber is clear-cut on 500 separate units and about 110,000 acres are cut selectively. This presents a terrific job of hazard reduction and subsequent protection of the rapidly expanding cutover areas. 1951 was a disastrous fire year in Region 6 (33,215 acres and 653,166 M feet of national forest timber burned) and most of the losses were associated with cutover areas, logging and rail-roading operations and escaped slash fires. In 1952 the burned area was held to 11,595 acres within national forest protection boundaries despite an increase of 775 fires. Over half of the burned area resulted from 4 escaped slash fires. Searching reviews were made of the slash fires and these resulted in action to (1) make more adequate collections for slash disposal, (2) strengthen preparatory measures such as snag falling, fire line construction, and advance planning, (3) improve execution of burning plans, and (4) more attention to patrol and mopup. We saw evidence of good followup on the fire reviews.

There have been relatively few serious fires in the selectively cut

areas on east side forests in the past decade. A total of 41,715 acres of national forest land has burned since 1943 which is less than 4 hundredths of one percent annually. This indicates that the policy of partial disposal is working reasonably well, despite the alarmist statements in the Bean Report. Nevertheless the expanding acreage of cutover areas is adding progressively to the total size and complexity of the fire protection job.

Some of the slash burning difficulties are attributed by the Region and the State Foresters to unreliable weather forecasts.

Recruitment and Training. While the fire control job has been growing in complexity and size the seasonal forces organization has declined in numbers and quality of men. This is due to the depreciation of the dollar and the inability of the Forest Service to hold experienced men in competition with outside employment. Short-term forces are made up largely of high school boys and college men who come late in spring and leave early in the fall. With an 80 to 90% turnover each year the Region has a huge training problem which draws heavily on the time of yearlong personnel. Through sheer force of necessity much of this work is delegated by district rangers to general district assistants. Some feel that too much of this work has been delegated to subordinates. Nevertheless Region 6 has had a consistently good guard training program for many years which partially accounts for its keeping on top of the fire job as well as it has.

Trespass. The Region is laboring under a large backlog of uncompleted trespass cases which arose largely from industrial fires. In many of these the stakes are high and resistance is tough. A special drive is being made to clear up the large number of cases on file and progress is being made but the overall problem of prompt investigation and submission and settlement of trespass cases is far from solved.

Hunters Fires. Hunter fires have been a perennial problem, especially in Oregon where the deer season has traditionally been early in the fall. Close cooperation with the State Game Departments has reduced the bad public relations problem which arose in the past when the fire situation required closing the forests during hunting season. In 1951 this resulted in a situation of needless confusion between the Service and the State of Oregon which created much ill-will of hunters towards the public agencies. A council of Regional Office and State men, coupled with new legislation in Oregon, gives promise of correcting this situation. Changes in hunting season dates have also been worked out. Fire Control, Wildlife, and the State Game Departments all reported their belief that the conflict between fire prevention and hunting will not arise again from the same causes.

1953 Record. The 1953 fire record was the best ever attained. Burned area was held to 1,432 acres. There were 1,142 fires, 357 of which were man-caused. This is a remarkable accomplishment in view of the hazards present and the complexity of the overall fire control job.

Fire Research

The 1947 GII urged strengthening of fire research by the Region and W.O. Although determined effort has been made to do this by all concerned, there is now an even greater need for more fire research especially on slash burning and its associated effects on hazard reduction, watershed conditions, and restocking. The Station has two men assigned to the subject full time and, of course, the other projects of the Station as soils, and forest influences also contribute to the field. At best, however, the program is hardly more than a nibbling on the edges of a vast and urgent problem.

Recommendations

1. The program of training inexperienced forest officers in all phases of fire control should be continued and strengthened.
2. The program already started for improvement in slash disposal practices should be continued.
3. The Region and Station should attempt to analyze the reasons for failures in fire weather forecasting and the Region and W.O. should then followup with the Weather Bureau with such help as is possible to strengthen fire weather forecasting.
4. Efforts to strengthen its recruitment and training program for short-term personnel should be continued. Every advantage should be taken of using TSI, slash disposal and other project working funds to prolong employment. The Region and Washington Office should jointly explore the possibility of upgrading key sub-professional personnel to make continued Federal employment more attractive.
5. The present drive to clear up pending trespass cases should be pursued as vigorously as possible and the Washington Office should give special attention to this problem when the allotment base is revised.
6. The Region should constantly seek to improve the suitability of, and compliance with fire prevention clauses included in all sales and special-use contracts. In such enforcement lies the best tool for operator and user fire prevention.
7. The efforts to reduce hunter fires should be persistently followed up in cooperation with the States.
8. We reiterate the recommendations of the previous GII that fire research be strengthened as rapidly as available finances will permit. This is a field in which industry and the States have much at stake and it is suggested that possibilities of cooperative financing be more fully explored.

OPERATION

Shortly after the close of this GI Inspection Gordon Fox made a very thorough functional inspection of Operation in R-6. His overall finding agrees with ours; namely, that the Operation activities are well handled. Fox has prepared a detailed report of his findings and, to the extent that we checked Operation activities, we concur in his conclusions and recommendations. Rather than repeat them we are confining comments in this report to a few Operation matters of major concern.

Organization.

Regional Forester Stone emphasized his intention to keep staffs as small as possible at R.O. and Forest levels so as to get a maximum of personnel right out on the ground. The most recent study of the situation was completed in 1952.

The Region is striving to keep its organization consistent with changing work loads. It favors the division of heavy ranger districts rather than build ranger assistant personnel to unusual levels. In the past two years eight districts have been divided into fourteen, and four more are currently being studied.

The 1947 GII report recommended that the Colville Forest be made a part of Region 6. We discussed this with Region 6 but not with Region 1. We understand that Region 1 is strongly opposed to a change in Regional boundaries. On the other hand both Cowlin and Stone recommend that the Regional boundaries be changed to coincide with State lines. They feel strongly that relationships with the State Forester, State Fish & Game Department, Washington State College and other agencies could be simplified and strengthened if the Region and Station were responsible for work in all of North Eastern Washington. We asked the State Forester if S&P cooperation would be simplified for him if he had to deal with but one region. He expressed no concern over the present divided authority; he said he has fine relationships with both Regions.

Administrative Improvements.

Housing. As elsewhere throughout the Service the Region has been up against it to provide quarters for its personnel especially for men out on timber sales and on new ranger districts. It has displayed remarkable ingenuity to meet the problem. Barns and warehouses have been changed into dwellings--with some notable successes, as at Paisley on the Fremont--and twelve surplus houses bought from a Housing Authority are being moved to the field. A great deal has been done in these ways and the Region is to be commended for it. Adequate houses in places where rental is impractical is one of our most crying needs if we are to hold high caliber family men. The problem is Service wide and a real solution can only come through more adequate financing. We also saw the efforts being made to enlarge offices for additional personnel by improving basements, partitioning rooms, enclosing porches, and the like. Rental opportunities are not being overlooked, as at Ellenburg on the Wenatchee where a ranger's office with storage room and garage was newly

rented on very favorable terms. This problem is aggravated when Districts must be divided. Theoretically, this need not require more personnel and thus no more desk space or housing but often it does and we were told that re-districting has been postponed at times due to this difficulty.

Housekeeping. We looked sharply at the general housekeeping and degree of repair at all stations visited. A few were of a general shabby appearance but most of them were satisfactory, and some—Silver Lake on the Fremont, for example—literally sparkled. As is also true in the campgrounds, the amount accomplished for the maintenance dollar depends upon the ingenuity and personal interest of the Ranger and, perhaps, the Supervisor. The plea that every spare minute should go on timber sales is a valid one but nevertheless we were struck by the fact that some Forests had better-kept improvements than others although Operation assured us that the money was proportioned as fairly as possible.

Use of time

Diary analysis of 82 men on six forests for the six month period of 5/1-10/31/52 were furnished us. These 82 men worked 88,151 hours, which is 12,018 hours more than normally available on a 40 hour week basis. This is 11% overtime. If allowance for leave is made by basing the comparison against the standard figure of 900 hours available in a six months' period, the overtime amounts to 25%. This is a staggering record of uncompensated work.

The analyses seemed to show that some supervisors, staff men and rangers spent too much of their time in the office. However, this picture changes quite a bit if the field time actually worked is compared with the time normally available on a "40 hour per week plus leave actually taken" basis. On such a basis supervisors are spending from 45 to 64 percent of their normal time in the field. Sixteen of twenty staff men spent from 45 to 94 percent of their normal time in the field. The four exceptions are for men who spent but 22, 30, 35, and 36 percent of their time in the field. Seventeen rangers averaged 79% of their normally available time in the field, (52% to 108%). With the few exceptions noted, and which should be looked into, this is a good record.

One ranger who spent but 58% of his time in the field between May 1 and October 31 told us that if he just had an additional helper he could sell a great deal more of the salvage timber now being lost. This man has a clerk; and also a district assistant, and three timber management assistants. His field men are spending about 70% of their time in the field, and 30% plus additional overtime in the office. Apparently, this ranger needs guidance in how to handle his office load so that he can get field time to sell more of the salvage timber.

Recommendations

1. More of the extremely heavy workload districts should be divided as rapidly as finances and housing conditions permit in order to obtain more on-the-ground attention to resource management by the district ranger and to help provide promotion opportunities.

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2. The Washington Office should take the lead in analyzing and resolving the question of the boundary between Region 1 and Region 6. The regions and stations concerned should be invited to participate in the study and present the arguments supporting their positions, but the decision will have to be made here.
 3. We can offer no suggestions to the Region for solving its housing problem except to urge continuation to the fullest extent practicable, the measures that have been employed. To the Washington Office we recommend that a special effort be made to obtain recognition of the problem by the Department, Budget Bureau and Congressional Committees. Region 6 and other regions with similar acute problems should be requested to furnish case history material that can be used to support requests for housing funds.
 4. The Region should critically analyze the use of time by rangers and other field personnel to determine how to get more effective time spent in the field and more efficient use of time which must be spent on non-field duties.

PERSONNEL

The Region's personnel problems are great in every aspect--recruitment, training, supervision, advancement, and all else. Yet we, like the GI Inspectors of 1947, went away with the positive feeling that these matters are being well handled, and that the personnel we met is an exceptionally good group of people. Insofar as the individuals whom we met are concerned we found that enthusiasm, a selfless desire to do the job, and considerable price of accomplishment were pretty much evident everywhere--this despite the heartbreaking obstacles of inadequate financing, flaws in certain laws, and a never-ending sniping by certain people. (The great majority of private citizens whom we met would agree with the above sentence, although one or two expressed wonderment that it should be so.) If serious disaffection exists anywhere it did not reveal itself to us. There is ample reason for the Service to be intensely proud of the 1,500 yearlong personnel and 3,000-3,500 summer employees that are on the job in the Pacific Northwest. This strong aggregation of people with their spirit did not arise spontaneously, but was created only through a very successful and long-range program of selection and training, coupled with consideration of personal problems.

Training

The 1947 GII gave many recommendations concerning training needs, methods, goals, etc. As mentioned under the various functions, there is being conducted an aggressive and well set-up series of training courses, meetings, etc. for practically every facet of Forest Service work. Although this program is guided and sparked from the Regional Office the actual work with the trainee is done by the local supervisory forces at group sessions and by on-the-ground follow-up. Details of how this reaches practically every man from new fire guards and junior foresters up to assistant regional foresters, and State and industry cooperators as well, are given on pages 4 and 10-13 of the Personnel Division's portion of Appendix 2. Two items in this are especially noteworthy--the orientation program for new professional personnel which is conducted jointly by the Station and Region, and the "cumulative service experience record" now being tried out to guide the development of men until they reach grade GS-7. The training of new professional employees seems well cared for.

Forest School Students

We inquired specifically into the report (several years ago) to the effect that rangers were not becoming acquainted with forestry students at work on their district, nor frankly discussing shortcomings, if any, before the students' return to school. Allegedly some went back to school with the illusion that they had done well, only to learn the contrary. We were told by Professor McCulloch of O. S. C. that this is no longer the case. He said he is satisfied that frank discussions are now the rule at the close of the season's employment, and that most students now return to college with great respect, and frequently deep personal loyalty, for their ranger. The Region should continue to stress this phase of dealing with professional students, for its long-range effect cannot be overvalued.

Promotion Opportunities

Region 6 has made a careful study of the rate of promotion that can be expected for its professional foresters between the grades of GS-5 and 12. In general, most positions are filled by comparatively young men of good experience from a variety of assignments. Competition is keen for any vacancy, and the promotion rate is much slower than desirable for keeping men enthusiastically striving to advance. The study shows that it took an average of 9 years for 90 district rangers to advance to grade GS-9 from GS-5 positions. The Region recruits 60 to 70 junior foresters annually and such a slow rate of promotion for them, and their predecessors, is a real cause of concern.

Safety

The Station has received six Chief's citations and two from the National Safety Council for its safety record. It leads all the Stations. The Region's accident frequency rate of 42.79 in 1939-46 has been reduced to 17.26 in 1947-52. It was 8.08 in 1953 and won a Chief's citation. In the course of the trip we saw but two definitely thoughtless unsage things. One was on a road construction job adjacent to a public campground where an open box of dynamite was placed well away from the machines at work, but unfortunately along a footpath between fireplaces. The other was the use of a row boat without using life preservers. In the other places visited safety practices seemed uppermost in the local forest officers' minds. Shop bulletin boards with exhibits and posters were universal. The safety program is obviously getting full support from the Regional Forester, the Director, and their men on down to the beginners.

Forest Service Alumni

A unique organization exists in the Pacific Northwest--the Thirty-Year Club. This Club of retirees and forest officers of thirty years' service is the Region's means of maintaining contact with the retirees and helping them to continue feeling a part of the Forest Service by keeping them acquainted with current operations. This is a splendid thing, well worth the effort required to keep it active. We were honored by being guests at a meeting of this Club.

Employment of Engineers

We discussed at length in the field the problem of employing men--either logging engineers or civil engineers--who are qualified to locate and supervise construction of timber roads. The Service has been unable to compete on the basis of wages with the demand for such men by forest industries, highway departments, and other road building organizations. Further, present incumbents become dissatisfied because of the ceiling on their promotion opportunities. The Region's plan to improve the situation by establishing a new Civil Service series for Forest Engineers was submitted to the Chief's Office for consideration as a solution to the problem but this office felt that a better solution would be to revise the Timber Management option of the GS 460 professional forestry standards. This has been done and

a suggested draft of standards has been transmitted to the Civil Service Commission for approval. When this provision was being worked up with the help of the Region 6 representative, sufficient examples of work of this type were included so that logging engineers employed under the Timber Management option can be used for this purpose, unless they are to be used 100% of the time on road work. If this revision is approved by the Civil Service Commission it should help solve the Forest Engineer problem but it isn't the sole solution. A more aggressive program of recruiting civil engineers is also needed.

Recommendations

1. Keep up the good work in training and safety.
2. The Region with the active help of the Washington Office should seek out opportunities to break the serious "log jam" in promotion opportunities in the administrative ranks below grade GS-12. One solution to the problem is to keep the rate of promotion study current and use it to insure that deserving people are not being overlooked. Some relief could also be provided by upgrading the more important timber management assistant and key fire positions, making more GS-11 ranger districts and more GS-13 forests where conditions justify, etc. Consideration on a case-by-case basis will be needed to do this. Another solution is to make more out-of-region transfers when suitable opportunities arise.
3. Interregional transfers should be increased for the following purposes:
 - a. Broadening experience of men who are capable of filling higher positions in the Service.
 - b. Avoiding provincialism in the supervisory ranks.
 - c. Affording promotion opportunities for some of the large group of timber management technicians whose talents and training can be used to advantage in regions where training opportunities in this field are more limited.
4. The Region, with assistance of the Washington Office, should step up its efforts to recruit engineers.

FISCAL

In F. Y. 1953 the Region spent more than \$19,000,000 and collected \$43,000,000. We did not take any of our limited time in the office to delve into how this is being accomplished. The Region has been inspected by the Chief's Fiscal Office at the prescribed intervals, and by the GAO as well. The real deficiencies found by these inspections are very few. Some matters which need improvement were readily discussed with us. These included such things as space, equipment, procedure, internal audit, inspection and better financial operating plans on the forests. Progress in their solution is evident.

APPENDIX NO. 1

MEMO TO: Edward P. Cliff and Roland Rotty
 FROM: W. F. McCulloch
 Re: Regional Inspection R-6
 Corvallis, Oregon, August 10, 1953

Within the last five years I have been on every forest in Region 6, on seven of them during official inspection trips with Personnel or Operations. As a collaborator, I participated in a G.I.I. on the Willamette in July. The observations below therefore reflect actual field experience.

1. Recreation is highly important in the Pacific Northwest, and the Region has done an excellent job of maintaining good facilities with exceedingly limited funds. Much goodwill for the Forest Service has resulted. More funds are needed to meet the progressively increasing demand.

The Region faces a problem in the request for reservation of large areas for one specific type of recreationist, the nature lover. Small pressure groups of this persuasion are urging that more and more forest land be set aside for museum-type purposes. These people are vocal out of all proportion to their numbers or their importance in the nation. If their wishes were granted, a serious dislocation of the local lumber economy could occur in affected areas. The greatest good to the greatest number of workers should be weighed against the limited use which these few people would give large areas of commercial forest.

2. Some time ago responsible agricultural leaders in the state were asked to suggest areas hostile to the Service where hearings could be held on grazing matters. The intent obviously was to gather "evidence" detrimental to the Service. The reply was that a good job was being done and there were no hostile areas. To my knowledge the planned "hearings" were not held in Oregon.

3. A fine sense of loyalty to the Service is engendered in young men by the field personnel. Students return to us after seasonal work, thoroughly sold on the Forest Service. They talk of "my ranger", "my forest" as though they were permanent employees. This illustrates the high morale which obtains in the Region.

One aspect of student employment has improved markedly in recent years--discussion of the employee's performance rating before he returns to school. Summer training on the job has increased. Seasonal employees are now considered more as potential career men for the Service, and less as units of man-hours. The close liaison between Personnel Management and the schools has helped in this area.

4. It would be unfair to imply by omission that some divisions are not doing good work. This is not so, in my observation. However, honesty compels the statement that outstanding work is presently being done by Operations and Timber Management. Planning and administration of operations have been brought to a high level of efficiency.

The special contribution of Timber Management has been the cooperation of the Regional Office staff with the field, so that the men on the ground can get their work done effectively. There will always be some complaint

about Forest Service timber sale administration because high operating standards are maintained. These objections should be qualified by weighing the sources from which they come; and should be balanced against the solid support given Timber Management by the professional and the substantial industrial groups. As profit margins fall and uneconomic operators squeeze themselves out, there will be more grumbling about stumpage prices. Such growling should not be allowed to obscure the good work being done in this division.

5. The Region has been very effective on fires. The ability to fly in sufficient trained men to drown a fire results in some complaint from smaller fire-fighting agencies about Forest Service costs in getting fires out, but they do admit that the fires are put out.

6. There appears to be good collaboration between various divisions most of the time, for the greater good of the Service.

7. Forestry schools in this area collaborate with the employing agencies by providing short courses for field personnel. Oregon State College has given courses in aerial photo interpretation, forest soils, road location, and stock judging, the last two exclusively for Forest Service personnel. The men have attended on their own leave time. Presumably their effectiveness will increase and benefit the Service; it is recommended that they be allowed to attend on Service time.

8. One obstacle to efficient operation is the employment by the Service of civil engineers to do forest engineering. This has resulted in (1) excessively costly roads, in some cases over-built, almost to state highway standards; (2) undue soil disturbance through deep cuts and fills; (3) less total road construction; (4) hindering of efficient timber harvesting; (5) subordination of other forest values to the road; and (6) depreciated public relations with operators and taxpayers.

Certainly the Service needs civil engineers for bridge design, concrete work, analysis of structural materials, and so on. But to build forest roads for forestry purposes it should employ forest engineers, men to whom a road is a means to multiple-pur-pose management. Civil engineers, unfamiliar with overall forest management, tend to view a road as a single-purpose end in itself.

You will recall various examples which were cited to illustrate this situation. Supervisors on important timber management forests will corroborate.

9. For some years watershed management was not considered seriously by the Service or the forestry schools in the allegedly well-watered Northwest. In recent years, the Region has moved aggressively into this field and has begun work of far-reaching consequence. A ticklish public-relations situation has been well handled, selling the public on the proposition that forests can yield both wood and water at the same time. This is particularly true in Corvallis where the

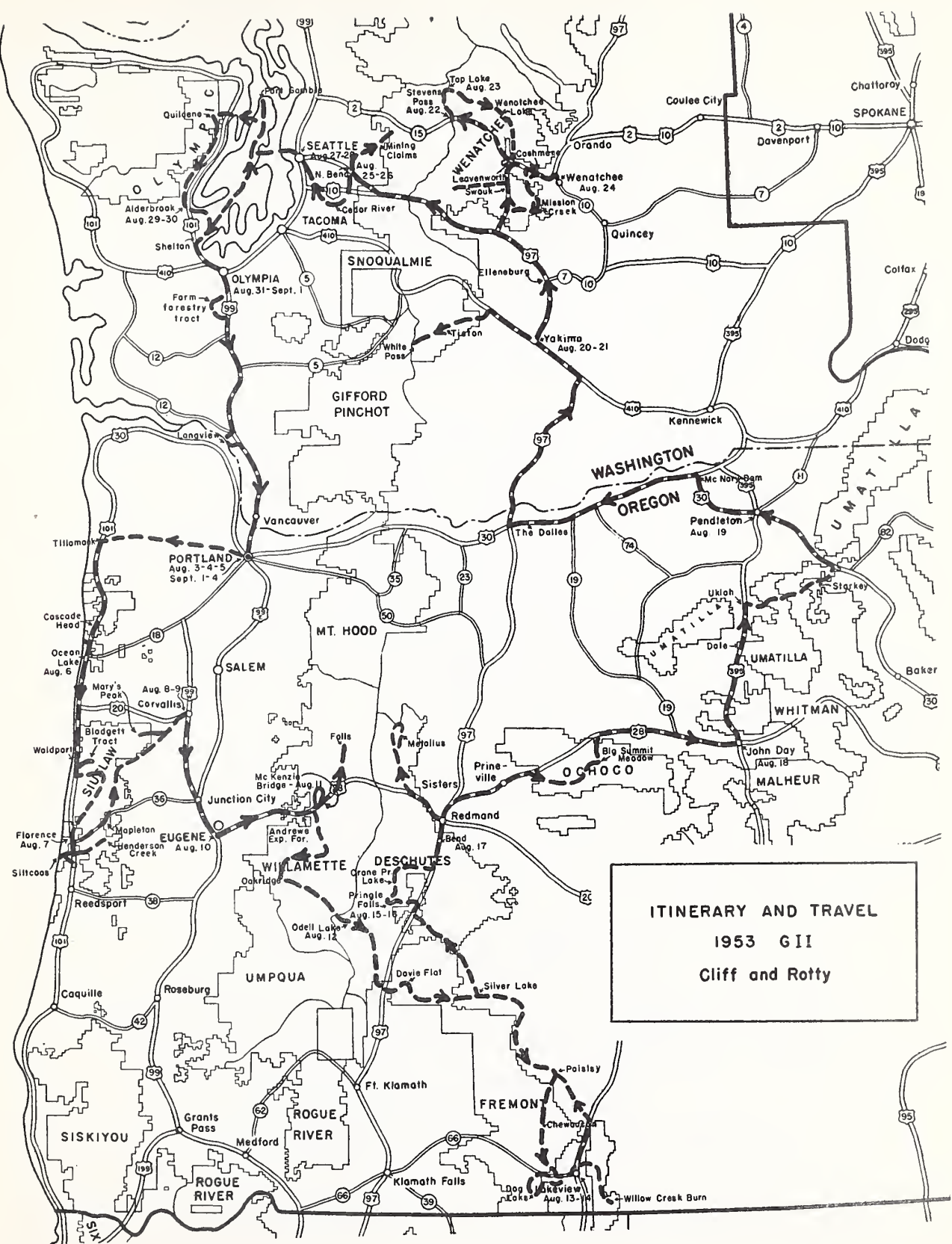
forest supervisor has convinced the apprehensive city council that timber harvesting on the city watershed is acceptable.

10. To summarize; I have been in the field in all ten regions, and against this experience must rate Region 6 at the top. The organization is tight, morale is high, the men are respected, and a very large volume of business is handled effectively.

/s/ W. F. McCulloch

W. F. McCulloch
Collaborator

cc: J. Herbert Stone



ITINERARY AND TRAVEL
1953 GII
Cliff and Rotty



NON-FOREST SERVICE PEOPLE MET BY CLIFF AND ROTTY
DURING THE REGION 6 GII

- Aug. 5 Truman Collins, Collins Pine Co.
Marshall Dana, U. S. National Bank
Stuart Moir, Western Forestry & Conservation Assn.
Albert Arnst, Editor, Lumberman
Tom Humphrey, Editor, Oregon Journal, Portland, Ore.
C. W. Welch, Oregon Fish & Game Department
Wm. J. Smith, Former Director National Wildlife Federation
- Aug. 6 Ed Schroeder, District Forester, Oregon State Forestry Dept.
Frank Sargent, In Charge, Tillamook Burn Rehabilitation
L. E. Francis, Vice-President, Tillamook Branch, First National Bank of Portland
- Aug. 7 Raymond Cox, County Commissioner, Lincoln Co., Oregon
Claude Hall, Storekeeper and State Legislator
- Aug. 8 Reg Titus, Executive Secretary Western Forest Industries Assn.
- Aug. 10 Percy Locey, Corvallis Chamber of Commerce
City Manager Conville, Corvallis
Walter F. McCulloch, Forestry Professor, Oregon State College
A. L. Strand, President, Oregon State College
Paul Dunn, Dean, School of Forestry, OSC
T. J. Starker, Professor, Forestry, and prominent timber land owner and operator
_____, Manager, Weyerhaeuser plant at Eugene, Oregon
- Aug. 12 Norman Stone, Hines Lumber Company, Westfir
Representatives of Lumber Industry at Lakeview including:
J. T. McDonald, Lakeview Logging Co.
Lloyd Wambold, Logging Superintendent for Lakeview Logging Co.
Bob Adams, Adams Lumber Co.
Ted Conn, Attorney
Jim Clark, American Box Company
Sam Jaksick, White Pine Lumber Company
- Aug. 15 Colonel Wm. B. Greeley, Advisory Council
Garnett Cannon, Advisory Council (Insurance, Portland)
Judge Robert Sawyer, Advisory Council (Editor, Bend Journal)
Werner Mayer, Advisory Council (Logger)
Ben Day, Advisory Council (Stockman)
Phil Hitchcock, Advisory Council (State Senator)
Stanley Jewett, Advisory Council (Biological Survey retiree)
- Aug. 16 Al Glassow, Manager, Brooks Scanlon Lumber Company, Bend
Harry Pearson, Asst. District Warden, Oregon F. S., Sisters

- Aug. 18 Prineville Chamber of Commerce luncheon guests
 Hugh Thayer, B. L. M.
 Mel Crawford, District Forester, Oregon Forest Service
- Aug. 19 Sam Coon, Congressman, Second District of Oregon
- Aug. 21 _____ Quoibbach, Ski Patrol "live wire," Longview, Washington
- Aug. 22 Art Bahosky, Sheep man, Yakima, Washington
 Unidentified camper at Tumwater Campground
- Aug. 26 Unidentified camper at Keechelus Campground
- Aug. 27 Allen Thompson, Forester, City of Seattle
 Roy Morris, Superintendent, Seattle City Water Department
 Harold Goodrich, Logging Superintendent, Mountain Tree Farms
- Aug. 28 P. Dwight Edgell, Western Land Agent, N. P. Railroad
 E. R. Hoffman, Superintendent, Seattle City Light Department
 Lars Nelson, Master, Washington State Grange
 Simpson Logging Company Luncheon Guests
 Tom Glead
 Bill Reed
 Henry Bacon
 _____ Muntly
 Chris Krienbaum
 Karl Krouse, Washington Game Department
 Oliver Edwards, Washington Game Department
- Aug. 31 George Drake, Simpson Logging Company
 Max Schmidt, Jr., Simpson Logging Co., Logging Manager
 Bud Puhn, Simpson Logging Co., General Operation Manager
 Oscar Levin, S. Olympic Tree Farm forester
 Archie Adams, Simpson Logging Co., Logging Planner
 _____ Ahlskog, Manager, McCleary door factory
- Sept. 1 Mike Webster, State Forester, Oregon
 George Spaur, State Forester, Oregon
 John Kingsbury, Service Forester, Port Orchard
- Sept. 2 Gary H. Sanders, Service Forester, Olympia
 Long Bell Lumber Company officials:
 Roy Morse
 Ali Sandoz
 Long Ellis
- Sept. 3 Ed Stamm, Crown Zellerbach Corp.
- Sept. 4 Frank Manning, Owner, Manning Seed Company

August 25, 1953

COOPERATIVE STUDIES UNDER WAY WITH OUTSIDE AGENCIES
BY THE DIVISION OF FOREST MANAGEMENT RESEARCH -1953

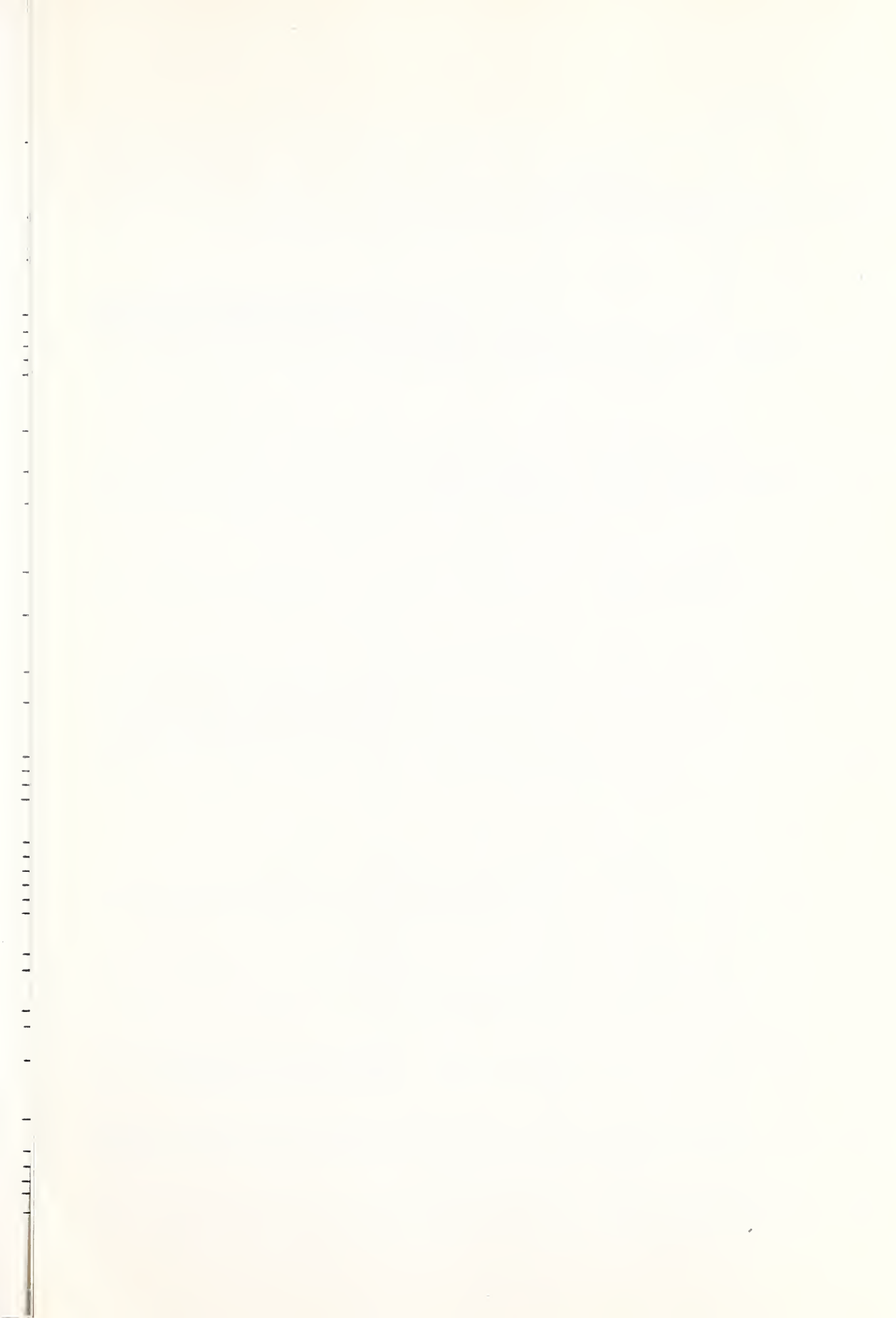
1. A prescribed burning study for ponderosa pine on the Colville Indian Reservation with the Office of Indian Affairs.
2. Tests of promising rodent repellents with the State of Washington and the Denver Laboratory of the Fish and Wildlife Service.
3. Fish and game studies at Blue River with the Oregon Cooperative Wildlife Research Unit.
4. Investigations of mistletoe on ponderosa pine and root rot (*Poria weirii*) on Douglas-fir with the Office of Forest Pathology, the State of Oregon and Oregon State College.
5. A study of animal damage in Douglas-fir plantations on the Clemons Tree Farm in cooperation with the Fish and Wildlife Service and Weyerhaeuser Timber Company.
6. A 2,000-acre pilot plant trial of blister rust control in sugar pine stands on the South Umpqua Experimental Forest with the Bureau of Entomology and Plant Quarantine.
7. The development of a simplified classification for forest soils of the Pacific Northwest with Washington State College.
8. Cooperation with Manning Seed Company in establishing seed zones and developing a method for certifying tree seed as to point of origin and climatic requirements.
9. Cooperative aid from the Publishers' Paper Company paved the way for a special study of windfall in the Oregon Coast Range by personnel at the Cascade Head Experimental Forest.
10. A cooperative aid study with the College of Forestry, University of Washington, to determine the influence of slash burning on the physical and chemical properties of forest soils and on the germination and survival of Douglas-fir seedlings.
11. The entire research program in young-growth management of Douglas-fir at the Voight Creek Experimental Forest is in cooperation with the St. Paul and Tacoma Lumber Company; at the McCleary Experimental Forest with the Simpson Logging Company; and at the Hood Canal Experimental Forest with the Pope and Talbot Lumber Company.
12. The research program at the Hemlock Experimental Forest in young-growth hemlock management is made possible through the cooperation of the St. Regis Pulp and Paper Company.

Frequency of Inspections of Region 6 by Washington Office Divisions
1947 - 1953

Branch	Division	General Functional Inspections			Limited Functional Inspections			Special Trips*	
		Required	Trips made	Reports made	Trips made	Reports written	Trips made	Reports written	
<u>Lands</u> <u>NFA</u>	Lands	2	2		1	1			
	Rec. & Lds.	2	2		3	3			
	Watershed	2	2		1	1			
	Range	2	2						
	Wildlife	2	2						
<u>AMI</u>	Timber	2	2		5	5	6	2	2
	Fire	2	2		1	1	2	2	2
	Engineering	2	3		6	5	3	0	0
			1						
	Personnel	2	2		3	3	2	2	2
<u>S & PF</u>	Operation	2	2		1	1			
	I & E	2	3		1	0			
<u>Fiscal</u>	CFP	2	4						
	CFM	2	3						
<u>Fiscal</u>	Fiscal	3	3				2	2	
<u>Research</u>	Fire	2	2						
	Range**	0**	0						
	Forest Mgt.	2	1						
	Watershed***	0***	0				1	1	1
	Products #	2 #	1						
	Economics	2	2						
		37	33	38	24	20	16	9	

(& 5 extra.)

*Get acquainted, trouble shooting, and stop-overs enroute. ***No work going on, hence no inspections needed.
 **Transfers of Reid and Pechanec to WO from R-6, and Chapline's work on 1947 #Annual consultations at
 / CFI made additional inspections in this function unneeded during the period. Laboratory in lieu of written field inspections.



ANALYSIS OF THE W.C. FUNCTIONAL INSPECTION REPORTS OF REGION 6

[illegible]

Frequency of Inspections of Region 6 by Washington Office Divisions
1947 - 1953

Branch	Division	General Functional Inspections			Limited Functional Inspections			Special Trips*	
		Required	Trips made	Reports made	Trips made	Reports written	Trips made	Reports written	
<u>Lands</u> <u>NFA</u>	Lands	2	2	2	1	1			
	Rec. & Lds.	2	2	2	3	3			
	Watershed	2	2	1	1	1			
	Range	2	2	2					
	Wildlife	2	2	2					
	Timber	2	2	2	7	5	6	2	2
	Fire	2	3	3	1	1	2	2	2
<u>AMI</u>	Engineering	2	1	1	6	5	3	0	0
	Personnel	2	2	2	3	3	2	2	2
	Operation	2	2	2	1	1			
<u>S & PF</u>	I & E	2	3	3	1	0			
	CFP	2	4	4					
<u>Fiscal</u>	CFM	2	3	3					
	Fiscal	3	3	3			2	2	2
<u>Research</u>	Fire	2	2	2					
	Range**	0**	0	0					
	Forest Mgt.	2	1	1					
	Watershed***	0***	0	0					
	Products #	2 #	1	1			1	1	1
	Economics	2	2	2					
		37	33	38	24	20	16	9	

(& 5 extra)

*Get acquainted, trouble shooting, and stop-overs enroute. ***No work going on, hence no inspections needed.
 **Transfers of Reid and Pechanec to WO from R-6, and Chapline's work on 1947 #Annual consultations at
 / GAI made additional inspections in this function unneeded during the period. Laboratory in lieu of written field inspections.



ANALYSIS OF THE W.O. FUNCTIONAL INSPECTION REPORTS OF REGION 6

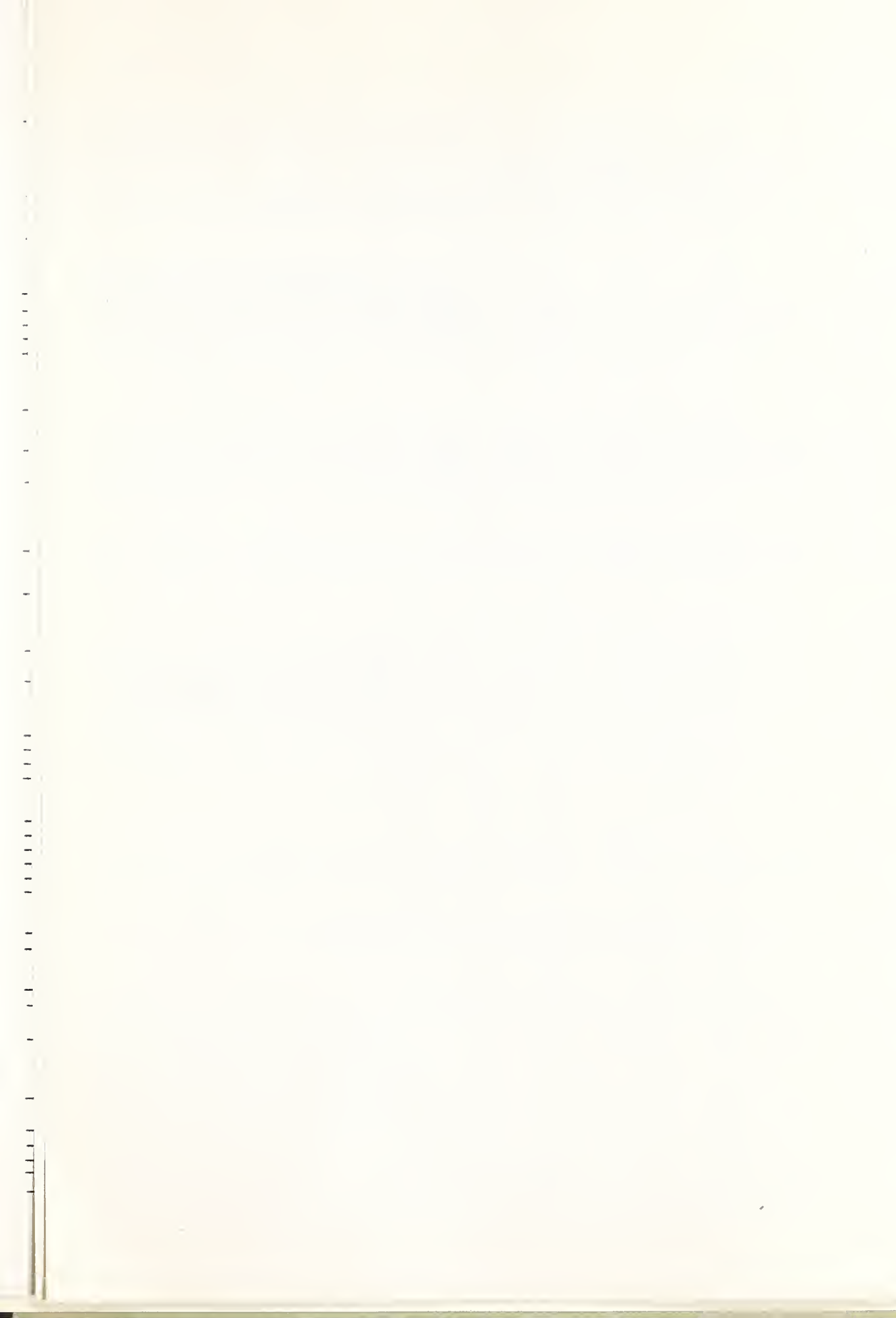
Type or Subject	Author	Date of			Required Frequency?	Did Inspector review previous report before going on his trip?	Comments		Conclusions	Recommendations	Provision for follow-up written into report?	Letter of transmittal	Follow-up	Remarks
		Trip	Report	Previous Report			Favorable	Unfavorable						
LANDS BRANCH														
LPI - Acquisition	Grover	Aug. '49	Oct. '49	'46	—	Yes	Yes	Yes	Yes	Yes	No	No	Hopkins' visit 8/51	Good general discussion of situation—good for historical record & current understanding.
GFI	Hopkins	Aug. '51	Sept. '51	'49	No	Yes	Yes	Yes	Yes	Yes	No	No	Yes	
GFI	Hopkins	Aug. '52	Nov. '52	'51	Yes	Yes	Yes	Yes	Yes	Yes	No	No	No	
STATE AND PRIVATE FORESTRY BRANCH														
Cooperative Forest Protection Division														
GFI	Eberly	Aug. '49	Nov. '49	'47	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Jan. '50	Yes	
GFI	Peirce	Aug. '50	Jan. '51	'49	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Jan. '51	Yes	
SFI	Stahl	Aug. '51	Oct. '51	'50	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Oct. '51	Yes	
GFI	Diehl	Aug. '52	Nov. '52	'51	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Dec. '52	Yes	
Cooperative Forest Management Division														
GFI	Bryan	Oct. '49	Dec. '49	'47	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Dec. '49	Yes	
GFI	Spillers	Aug. '51	Nov. '51	'49	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Dec. '51	Yes	
GFI	Rotty	May '52	July '52	'51	Yes	Yes	Yes	Yes	Yes	Yes	Yes	July '52	Yes	
FISCAL CONTROL														
GFI	Eric. & Christ.	Apr. '49	June '49	'48	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Oct. '53	Yes	
GFI	Darby	Aug. '50	Sept. '50	'49	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Feb. '51	Yes	Excellent report—fine summary & recommendations at start.
GFI	Dar. & Keus.	Apr. '52	June '52	'50	Yes	Yes	Yes	Yes	Yes	Yes	Yes	July '52	Yes	Excellent report— fine summary of deficiencies at start, also words of praise.
Special	Marshall	Oct. '52	A get acquainted trip.											
Special	Marshall	July '53	A "keeping-posted" made as a stop-over in route to another region.											
(GFI)	Vance & Hill	Nov. '53	Inspection trip made and report submitted after period of the GII trip.											
RESEARCH BRANCH														
Fire Research Division														
GFI	Brown	July '49	Sept. '49	None of record	None heretofore	—	Yes	Yes	Yes	Yes	No	Sept. '49	No	
GFI	Brown	July '51	Aug. '51	'49	Yes	Yes	Yes	Yes	Yes	Yes	No	Aug. '49	No	
Range Research Division														
GFI	None after 1946 Chapline because Chapline saw work as GII member 1948 and Reid and Pechanec transfers made inspections here less important than for other regions.													
Forest Management Research														
GFI	Zillgitt	July '52	Jan. '53	Prior to '48	No	?	Yes	Yes	Yes	Yes	No	Jan. '53	No	
Watershed Management Research														
Special trip	Frank	Sept. '52	Dec. '52	None of record	No	—	No	No	No	No	No	Dec. '52	No	Not intended to be an inspection— a journal of what he saw and thought.
Forest Products Research														
GFI (FOS unit)	Trayer	July '48	Sept. '48	?	No	?	No	No	No	No	No	No	No	A journal of places visited & things seen.
Forest Economics Research														
GFI	Garver	Oct. '50	Jan. '51	'48	Yes	Yes	Yes	Yes	Yes	No	No	Feb. '51	No	
GFI	Josephson	Oct. '52	Dec. '52	'50	Yes	Yes	Yes	No	Not definite	Not definite	No	Dec. '52	Yes	

Frequency of Inspections of Region 6 by Washington Office Divisions
1947 - 1953

Branch	Division	General Functional Inspections		Limited Functional Inspections		Special Trips*	
		Required	Trips made	Trips made	Reports written	Trips made	Reports written
<u>Lands</u> <u>NFA</u>	Lands	2	2	1	1		
	Rec. & Lds.	2	2	3	3		
	Watershed	2	2	1	1		
	Range	2	2				
	Wildlife	2	2				
	Timber	2	2	7	5	6	2
	Fire	2	3	1	1	2	2
<u>AMI</u>	Engineering	2	1	6	5	3	0
	Personnel	2					
	Operation	2	2	3	3	2	2
<u>S & PF</u>	I & E	2	2	1	1		
		2	3	1	0		
<u>Fiscal</u>	CFP	2	4				
	CFM	2	3				
<u>Fiscal</u>		3	3			2	2
<u>Research</u>	Fire	2	2				
	Range**	0**	0				
	Forest Mgt.	2	1				
	Watershed***	0***	0				
	Products #	2 #	1			1	1
	Economics	2	2				
		37	33	24	20	16	9

(& 5 extra.)

*Get acquainted, trouble shooting, and stop-overs enroute. ***No work going on, hence no inspections needed.
 **Transfers of Reid and Pechanec to WO from R-6, and Chaplino's work on 1947 #Annual consultations at
 / QAI made additional inspections in this function unneeded during the period. Laboratory in lieu of written field inspections.



Frequency of Inspections of Region 6 by Washington Office Divisions
1947 - 1953

Branch	Division	General Functional Inspections		Limited Functional Inspections		Special Trips*	
		Required	Trips made	Trips made	Reports written	Trips made	Reports written
<u>Lands</u> <u>NFA</u>	Lands	2	2	1	1		
	Rec. & Lds.	2	2	3	3		
	Watershed	2	2	1	1		
	Range	2	2				
	Wildlife	2	2				2
<u>AMI</u>	Timber	2	2	7	5	6	2
	Fire	2	3	1	1	2	2
	Engineering	2	1	6	5	3	0
	Personnel	2	2	3	3	2	2
	Operation	2	2	1	1		
<u>S & PF</u>	I & E	2	3	1	0		
	CFP	2	4				
	CFM	2	3				
<u>Fiscal</u>	Fiscal	3	3			2	2
<u>Research</u>	Fire	2	2				
	Range**	0**	0				
	Forest Mgt.	2	1				
	Watershed***	0***	0			1	1
	Products #	2 #	1				
	Economics	2	2				
		37	33	24	20	16	9

(& 5 extra.)

*Get acquainted, trouble shooting, and stop-overs enroute. ***No work going on, hence no inspections needed.
 **Transfers of Reid and Pechanec to WO from R-6, and Chaplino's work on 1947 #Annual consultations at
 / QAI made additional inspections in this function unneeded during the period. Laboratory in lieu of written field inspections.

ANALYSIS OF THE W.O. FUNCTIONAL INSPECTION REPORTS OF REGION 8

Type or Subject	Author	Date of			Required Frequency?	Did Inspector review previous report before going on his trip?	Comments		Conclusions	Recommendations	Provision for follow-up written into report?	Letter of transmittal	Follow-up	Remarks
		Trip	Report	Previous Report			Favorable	Unfavorable						
NATIONAL FOREST ADMINISTRATION BRANCH														
Recreation and Lands Division														
LFI - Winter Sports	Davis	Feb. '48	March '48	?	—	No mention	Yes	Yes	Yes	Yes	Yes	Apr. '48	Yes	
LFI - Winter Sports	Herbert	Feb. '49	June '49	'48	—	Yes	Yes	Yes	Yes	Yes	No	June '49	No	An excellent definite report.
GFI	Sieker	Aug. '49	Nov. '49	?	?	No mention	Yes	Yes	Yes	Yes	No	Nov. '49	No	Good report.
LFI - Winter Sports	Herbert	Feb. '50	Apr. '50	'49	—	Yes	Yes	Yes	Yes	Yes	No	May '50	Yes	An excellent definite report.
GFI	Herbert	Sept. '52	Nov. '52	'52	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Nov. '52	Yes	
Watershed Management Division														
GFI	Salmond	June '47	Apr. '48	'39	No	Yes	Yes	Yes	Yes	Yes	No	Apr. '48	No	
LFI - Specific watersheds	Schipull	July '49	March '50	'47	—	Yes	Little	Little	Not forcefully stated.	Yes, but not forcefully stated	No	Yes	No	A good discussion of what he found but not a definite inspection statement.
GFI	Salmond	July '52	None written	'47	No									
Range Management Division														
GFI	Dutton & Swift	July '48	Dec. '48	Refers to '47 GII	Yes	See Wildlife below this.								
GFI	Denham	July '51	Oct. '51	'48	Yes	No mention	Yes	Yes	Yes	Yes	No	Oct. '51	No	Good general discussion of situation—good for historical record and current understanding. Good report, well organized.
Wildlife Management Division														
GFI	Swift & Dutton	July '48	Dec. '48	Refers to '47 GII	Yes	No mention	Yes	Yes	Yes	Yes	No	Dec. '48	No	Good report—well organized and illustrated.
GFI	Swift	Oct. '51	Jan. '52	None mentioned	Yes	Yes	Yes	Yes	Yes	Yes	No	1 and 2 1952	Yes	
Timber Management Division														
LFI - Planting & EV	Melichar	May '48	June '48	'47	—	Yes	Yes	Yes	Yes	Yes	No	June '48	No	
GFI	Mason	July '48	Nov. '48	?	?	No mention	Yes	Yes	Yes	Yes	Yes	Nov. '49	Yes	
LFI - Sale costs, planting & VE	Melichar	June '49	Aug. '49	'48	—	Yes	Yes	Yes	Yes	Yes	Yes	Aug. '49	Yes	
GFI	Gross	Sept. '50	Dec. '49	'48	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Dec. '49	Yes	
LFI - Planting	Bruce	May '50	July '50	'49	Yes	Yes	Yes	No	Yes but not definite	Not definite	No	July '50	No	
Special	Melichar	June '51	No report - this was just a brief stopover, rather than a formal inspection trip.											
LFI	Payne	July '50	No report.											
Special case	Gross	July '51	Trip terminated by almost immediate recall of Gross.											
Special	Mason	Aug. '51	No report - this was a short trip to deal with specific problems.											
LFI	Bruce	May '52	No report.											
Special	Sump	July '52	Sept. '52	None pertinent	—	None pertinent	Yes	Yes	Yes	Yes	—	Not transmitted to region		Not an inspection trip—a "get acquainted" with western TM. An excellent report; definite, concise record of what he believes.
Special	Mason	Aug. '52	No reason to report—this was not an inspection trip.											
LFI - Planting	Bruce	Apr. '53	May '53	'50	—	Yes	No	No	No	No	No	May '53	No	Report lacks clear-out statements of what needs doing. General discussion of work on two burns and nursery building.
LFI - Management plans	Gross	May '53	Oct. '53	'50	—	Yes	Yes	Yes	Yes	Yes	No	Oct. '53	No	
Special	Hughes	July '53	Oct. '53	'50	—	Yes	Yes	Yes	Yes	No	No	Feb. '54		A get acquainted trip, rather than a formal GFI.
Fire Control Division														
GFI	Gustafson	July '49	Oct. '49	None previously made	—	First report None existed	Yes	Yes	Yes	Yes	Yes	Oct. '51	Yes	Excellent report.
LFI - Equipment	Punk	June '51	Nov. '51	None previously made	—	First report None existed	Yes	Yes	Not definite	Not definite	No	Nov. '51	No	
GFI	Gustafson	Aug. '51	Oct. '51	'49	Yes	Yes	Yes	Yes	Yes	Yes	No	Nov. '51	No	Excellent report.
Special	Gustafson	Jan. '52	Feb. '52											
Special	Gustafson	Jan. '53	Feb. '53											
GFI	Rasmussen	June '53	Oct. '53	'51	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Nov. '53	Not yet	Excellent report.

D
INSPECTION
R6

RECORD OF FOREST INSPECTIONS
C.Y. 1952

Region 6
Portland, Oregon
January 22, 1953

Forest	G.I.I.	I	E	F	O	K	L	S	G	A
Chelan	V	X	1951	^O X	X	O	1950	1951	1951	1950
Deschutes	V	1945	1951	1950	X	O	1951	1951	1948	1951
Fremont	V	X	1949	1950	X	1951	1946	1950	1949	1950
Gifford Pinchot	1950	1951	1951	^O 1951	1949	O	1947	X	^O 1951	1950
Malheur	1949	X	1950	1949	1948	O	X	1948	1950	1951
Mt. Baker	1949	O	1950	1948	^O 1948	1947	1950	X	1951	1950
Mt. Hood	1951	^O 1946	1951	1948	1951	1950	1951	1949	1948	X
Ochoco	V	1945	1950	1947	X	1947	1948	^O 1949	1951	1951
Olympic	1950	1950	^O X	1951	1949	^O	1951	1951	1951	1951
Rogue Riv.	1951	1950	1949	^O X	1951	1950	1951	X	1949	1951
Siskiyou	1950	1947	1948	^O X	1950	O	X	1948	1950	1950
Siuslaw	V	^O 1951	1947	1949	X	O	X	1951	1951	X
Snoqualmie	1949	1950	1951	1950	1948	1949	1949	X	1949	X
Umatilla	1951	^O 1950	1949	1950	1951	1948	1950	1950	1950	1951
Umpqua	1950	1949	X	X	1950	1948	1946	1951	1949	1951
Wallowa	1950	^O 1951	1950	1951	1950	^O	1945	X	^O 1950	1950
Wenatchee	1949	1950	X	1950	1949	1950	1949	1951	^O 1950	1950
Whitman	V	1950		1950	X	1950	1951	1950	1951	1951
Willamette	1949	1950	X	1950	1949	1948	1950	X	1950	1950

V - 1952 G.I.I.; X - 1952 Functional. Dates reflect time of last thorough or functional inspection.

O - 1952 Ltd. Functional

The Division of State & Private Forestry participated in the following inspections of State activities under the Clarke-McNary & Coop. For. Mgt. Acts:

	Oregon	Washington
Service Forestry	2	3
General fire protection dist. inspections	2	3
Limited dist. inspections (proj. fires)	3	3
Administrative & fiscal audits of coop.accts.	4	4
Coop. Nursery inspections	3	3

Record of Inspections at Field Stations -- Pacific Northwest Experiment Station

<u>Year</u>	<u>Location</u>	<u>Reason</u>	<u>Inspectors</u>	<u>Inspection Date</u>	<u>Report Date</u>
1952	Puget Sound	General	Meagher-Greeley	March	April
	Cascade Head	Fiscal & Bldg. maintenance			
	Puget Sound	F & BM	Kistler-Bergstrom	February	March
	Blue Mountain	General	Kistler-Bergstrom	April	April
	Siskiyou-Cascade	General	Pechanec	July	Sept.
	Deschutes	General	Cowlin-Baudendistel	June	October
	Wind River	General	Matson-Baudendistel	June-Oct.	December
	Siskiyou-Cascade	General	Meagher-Baudendistel	May	December
		F & BM	Kistler	December	Jan. '53
1953	Deschutes	F & BM	Kistler	January	February
	Deschutes	F & BM	Kistler-Bergstrom-Mowat	May	June
	Siskiyou-Cascade	F & BM	Kistler	March	April
	Blue Mountain	F & BM	Kistler-Costello	March	April
	Wind River	F & BM	Kistler-Bergstrom	April	April
	Cascade Head	General	Cowlin-Baudendistel	May	July
	Andrews	General	Meagher-Dunford	May	July

The fiscal and building maintenance inspections of Mr. Kistler, et al, are 1 or 2 page accounts of his visit.

The technical inspections of Director Cowlin, et al, are 6 to 9 page accounts with definite summaries and recommendations for the technical aspects of the work. They are clear, definite and pithy.

APPENDIX NO. 2

The twenty one items listed below comprise Appendix Number 2 and are filed with the original copy of this report.

1. W. O. Division Chiefs' Statements
2. Regional Chiefs' Statements
3. Research Chiefs' Statements
4. Statement for Deschutes Forest
5. " " Fremont "
6. " " Malheur "
7. " " Olympic "
8. " " Siuslaw "
9. " " Snoqualmie "
10. " " Umatilla "
11. " " Wenatchee "
12. " " Willamette "
13. " " H. J. Andrews Experimental Forest
14. " " Cascade Head Experimental Forest
15. " " Deschutes Research Center
16. " " Puget Sound Research Center
17. " " Starkey Experimental Forest and Range
18. Agenda for Regional Advisory Council Meeting
19. Detailed itinerary and schedule of persons to travel
with Inspectors
20. Slash Disposal Problem Statement by Brown and Lexen
21. Promotion-rate data



